

UNDERSTANDING HERITAGE AND MANAGEMENT
CASE STUDIES WITH INTERVIEWS IN THE FIELD OF HISTORIC
PRESERVATION IN CAMBODIA

A Thesis

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By

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ABSTRACT

This essay documents the efforts of the Archaeological Survey of India to work in Cambodia at the Angkor Archaeological Park via three case studies. It aims to understand the management dynamics of the Indian and Cambodian conservation organizations. Using a cross-cultural perspective, it formulates an understanding of heritage management from both sides, demonstrating that while each has the best intentions there remain several differences of interpretation, stemming in part from the English and French history of these countries.

The study rests on an examination of both the historical development of Indian and Cambodian preservation practices and interviews with Indian and Cambodian professionals actively involved in the field.

BIOGRAPHICAL SKETCH

Swapna Kothari completed her undergraduate degree in Architecture with a distinction in the year 2011. Having a view that architecture encompassed a broad field of play, she decided to pursue a part-time job with a non-profit in her hometown, Heritage Trust, Vadodara. The job she held included reaching out to the community and being around them to see how they viewed their heritage, they lived in. She organized tours for school children while getting permissions for a coffee table book from government offices. These activities led her to apply for a master's degree program, to get a wider perspective of the preservation field. Having attended Cornell and worked for the City of Ithaca, and other organizations in the United States via coursework, she longs to go back to India and help plan preserve its heritage. Her interest in Cambodia was revived while revisiting architectural history of South Asia stemmed from her inquisitiveness during her undergraduate years. Apart from the academic work, she has worked on preparing detailed project and condition assessment reports during her summer internship in Delhi, in 2013. There she worked for a startup conservation firm, Section CC, on a project sponsored by the World Monuments Fund for the Monuments of Madhya Pradesh (India) project. In the future her plans are to work for different Indian organizations helping make them self-sufficient, while systematically working to introduce an overall change in the thought process of the preservation field.

To everyone who stood beside me in sick and sin,
And in the completion of this research.

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LIST OF ABBREVIATIONS

A.S.I: Archaeological Survey of India

G.S.I: Geological Survey of India

APSARA: Authority for the Protection and Management of Angkor and the Region of Siem Reap

ICC: International Coordinating Committee

ITEC: Indian Technical and Economic Cooperation program

MEA: Ministry of External Affairs, India

MOC: Ministry of Culture, Cambodia

UNESCO: United Nations Educational, Scientific and Cultural Organization

EFFO: Ecole Francaise D' Extreme-Orient

FRI: Forest Research Institute, Dehradun, India

UNTAC: United Nations Transitional Authority in Cambodia

UNDCP: United Nations Development Program in Cambodia

GOI: Government of India

WAPCOS- Water and Power Consultancy Services (India) Ltd.

INTRODUCTION

Cambodia's history and its preservation have been comparatively well documented (Figure 1). The archaeological and architectural heritage in the Angkor region is well known thanks to the number of books, articles, movies and documentaries. The management of the sites, however, seems to have been given very uneven amounts of attention. Sites throughout the country are being managed and conserved by various countries throughout the world, mainly because of the country's inability to finance these projects by themselves. The local approaches and techniques of these countries are often pursued, along with methods unfamiliar to the Cambodians.

This study intends to document one country's (India) endeavors in Cambodia especially within the Angkor Archaeological Park via two projects already completed and one future project about to begin (Figure 2). The three sites are the Angkor Wat, Ta Prohm and Preah Khan Kompong Svay. The thesis intends to document India's endeavors in Cambodia within the Angkor Archaeological Park via three case studies. It aims to understand the management dynamics of the Indian and Cambodian conservation organizations. A cross-cultural perspective has been pursued here to formulate an understanding of heritage management from both sides.

The Angkor Archaeological Park administers an area of around 400 square kilometers covering several temples, hydraulic structures (basins, dykes, reservoirs,

and canals), and transportation and communication routes.¹ The Angkor region lies in the northwest part of the country in the Siem Reap province. The Park is under the safeguarding and management of the Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA). The Authority's creation corresponds to the temporary inscription of Angkor on the List of World Heritage Sites in Danger in December 1992.²

¹ <http://whc.unesco.org/en/list/668>, last accessed February 18th 2014.

² By the United Nations Educational, Scientific and Cultural Organization (UNESCO).



Figure 1: A 1991 shaded relief map produced by the Central Intelligence Agency, U.S.A showing the country's immediate neighbors, and provinces within the country. Angkor Wat's location has also been marked in the same; Source: http://www.lib.utexas.edu/maps/middle_east_and_asia/cambodia.gif

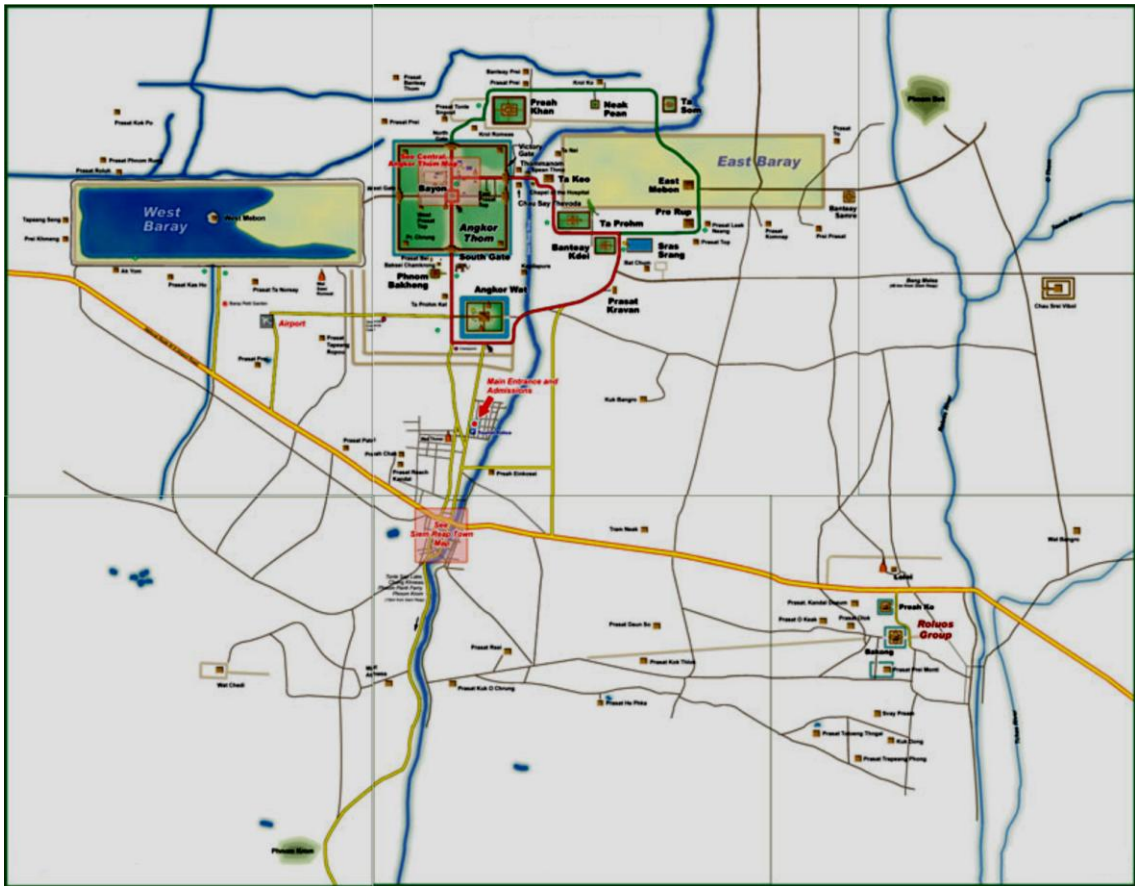


Figure 2: A map showing the greater Angkor Area with the Archaeological Park covering most of it; Source: Canby Publications, <http://www.canbypublications.com/maps/templemap.htm>

Since then the Park has been attracting more tourists annually. The temples, ranging mainly from the 9th to 15th century built in Khmer architecture style, have been regularly attended to and received added attention from tourists from Asia and Europe thanks to an increase in airline connections.³

Agencies from various countries have reached to agreements with APSARA to ‘adopt’ a temple and produce reports on new observations on the preservation

³ Getting to Siem Reap has become easier after direct flights to the city were introduced in.

activities undertaken.⁴ All of them follow set guidelines in doing so, to achieve a common standard.

Being a part of this, Indian teams formed by the Archaeological Survey of India (A.S.I) worked at two different sites previously and are on the way to get another site started. A complete report by the Indian team was done on the work they did on the first project and biannual reviews for the second have been made since work began in 2004. Of these sites Angkor Wat, and Ta Prohm lie within the current Park boundaries, while the last one is about 102 miles away. Angkor Wat⁵ was the first monument in whose preservation the A.S.I team became involved (Figure 3). The project extended over a period of seven years (1986-1993). Ta Prohm⁶, another early 12th century temple, is the second and most recent project with which A.S.I has been involved since 2004-5 (Figure 4). The retention of this monument as a ‘romantic’ site for its abundant natural environment⁷ is still a priority amongst the international preservation community. Currently it is undergoing a massive restoration so as to protect both the trees and the monuments.

⁴ To report at the ICC technical sessions; even mentioned by the Director Land Planning and Habitat Management in the Angkor Park at APSARA in an interview.

⁵ Sections of the temple they worked at included the stepped embankment of moat; in the fourth enclosure on western side the northern and southern elephant gateway, stepped entrance on west to northern and southern galleries and exterior and interior of the galleries; southern and northern libraries between 3rd and 4th and 2nd and 3rd enclosures; the cruciform terrace just before the 3rd enclosure; third enclosure; cruciform gallery between 2nd and 3rd enclosures; 2nd enclosure; Naga railing between 3rd and 4th enclosures along with chemical preservation on the entire surface of the temple.

⁶ Sections of the temple they worked at included the 3rd enclosure, eastern side south wing, central portion and north wing, southern side east wing, western side north and south wing; causeway between 3rd and 4th enclosure; 1st enclosure; Hall of Dancers; East and west gates of 4th and 5th enclosures, towers and galleries within 3rd and 2nd enclosures; chemical conservation at specific places.

⁷ The natural environment mainly includes massively overgrown silk-cotton, *Tetrameles nudiflora* and strangler fig trees.

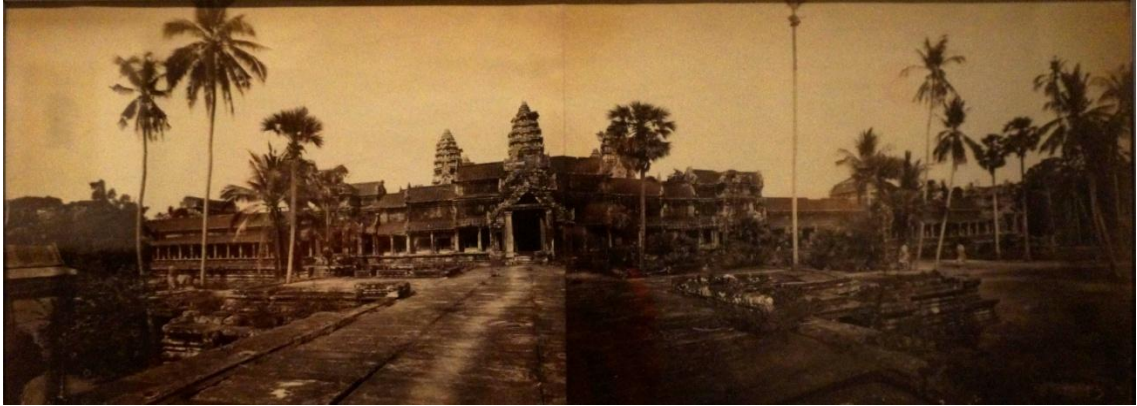


Figure 3: The western gateway of the third enclosure at Angkor Wat, c. 1870 by Émile Gsell; Source: Wikipedia, http://en.wikipedia.org/wiki/File:Angkor_Wat_circa_1870_05309.jpg



Figure 4: Panoramic view of Ta Prohm on left is west side and causeway connecting 4th and 3rd enclosure; Source: AirPano, <http://www.airpano.com/360Degree-VirtualTour.php?3D=Ta-Prohm-Cambodia>

This ongoing project has led to discussion of another possible project between the Cambodian and Indian governments. The temple under discussion is the Preah Khan Kompong Svay, more popularly known as Prasat Bakan (Figure 5). The complex is 164 kilometers (~102 miles) away in the Kompong Thom District of Preah Vihear province.

A complex with early 11th and 12th century structures and developments, Prasat Bakan is considered one of the few temples yet to undergo any preservation treatment. Following a similar pattern of mountain temples, Prasat Bakan is still occasionally used by the residents to revere Buddha. The poor condition of the temple is in part due to comparatively recent deliberate destruction with machine saws and hammers,⁸ leaving the inner complex in a disarray of stones.

The quality of the work done by the Indian team has been met with mixed reviews. This, in turn, has led the need for the extended study. Here the research intends to answer several questions. Why did the Indian government enter the conservation scene at Cambodia? What are the views of the A.S.I on the projects that have been carried out? How are the Indian decisions and efforts perceived by the Cambodian officials on site? What are the field conditions? What do the people associated on both sides of the project think about the conservation methods and the end results? More broadly, does each side's culture have a role to play in their working method and attitude towards the other?

⁸ To steal the *apsaras* statues' adorning the sides, to sell in the black market in the 1995 by a general of the Cambodian Army as mentioned by an interviewee; explained in other sections.



Figure 5: Eastern entrance of the fourth enclosure at Preah Khan Kompong Svay;
Source: Author

The project's scope involves investigating the conservation work undertaken at these sites operated by the Indian team, the Archaeological Survey of India (A.S.I). It also involves studying the Cambodian organization, Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA) and its involvement in these sites and overall in the conservation field.

To answer these questions and to further develop the study, a considerable amount of reading and fieldwork was launched in the fall semester of 2013. This encompassed reviewing the conventional history sources, preservation reports and cultural studies of Asia, the Indians, and the Cambodians.

To understand the management dynamics, a cross-cultural perspective was pursued so as to understand different thought-processes. The eastern-western approach⁹ is the most popular approach in such contexts, and it has been pursued here

⁹ The approach deals with views on popular concepts understood through the western perspective on themselves and the eastern part of the world, namely Asia- east and south eastern.

(via readings). It has been noted that Easterners believe everything is part of a cyclic format and they give importance to the community over individuals. Notions of independence and interdependence through societal and family values are also qualities unlikely to be seen elsewhere to the same extent, especially in the 'Western' world. Some differences exist in the thought processes due to the variance in culture amongst the Asians. Due to this, a more detailed research was carried out via articles and papers on the Khmer and Indian societies.

Studies indicated that international non-profit organizations ¹⁰ working toward development of the Cambodian society 'experience a high degree of cognitive dissonance as they come in contact with the idealistic nations embedded in donor programming'.¹¹ The scholars who have examined this behavior link it to historical events in the country. This makes it unlikely for the Cambodian to adjust to what the world assumes as 'given behavior'. Understanding certain actions according to the Khmer culture (for example, what is perceived as submissive actions) contradicts with what is being given to or expected from them by another culture. For example, acceptance in such cases by the Cambodians allows them to show little emotion or plain unawareness of what their reaction needs to be.

The patrimonial nature of traditional organizations has a deep impact on their understanding of political development. They consider participation the equivalent of being present and listening respectfully, with leaders not to be questioned. Moreover

¹⁰ Organizations working towards food, health and other needs of the country.

¹¹ Pg. 167, Morrison, Jenny Knowles. 2010. "From Global Paradigms to Grounded Policies: Local socio-cognitive constructions of international development policies and implications for development management". *Public Administration and Development*. 30 (2): 159-174. (Received from: Prof. Michael Tomlan).

it has been noted that they depend on social and organizational hierarchies to ensure their own financial and social status.¹²

The linguistics of the Cambodians was also noticed in the course of studying their language. Sentence formations point out that importance is given to the ‘context’ of the subject at hand. Many times it led to miscommunication and hence the need to listen patiently in the field.

Given the complexity of the cross-cultural study process, it is not easy to ask a society what it wants, when everything has been given to them through an ‘interdependent, hierarchical, autocratic society’.¹³ Avoiding conflict and easily ‘agreeing’ to what is given without much of a ‘contest’ has been a main part of the way they have lived.¹⁴

Historians have repeatedly commented that the numerous historical inscriptions demonstrate the subordinate nature of the Khmer. By contrast, a Cambodian proverb also points to their being strong-willed: ‘Don’t choose a straight path and don’t reject a winding one’.¹⁵ Unlike what has been suggested, the Khmers haven’t been completely assiduous towards oppressive regimes, as the number of revolutions the state underwent through prehistoric times suggests.

¹² Pg. 165, Morrison, “From Global Paradigms to Grounded Policies”.

¹³ Pgs. xvii, 2, 6, 29. Nisbett, Richard E. 2003. *The Geography of Thought: How Asians and Westerners Think Differently and Why*. New York: Free Press.

¹⁴ Reading the documented history suggests the same as well has been highlighted in Jenny Knowles Morrison’s paper, pg. 167, *ibid*.

¹⁵ Pg. 10, Chandler, David P. 1983. *A History of Cambodia*. Boulder, Colo: Westview Press.; Chandler mentions the connection when he is providing a background for the reader in starting the discussion of the Khmer society and how the Khmer were perceived as asleep people or enslaved both by the Khmer Rouge and the French before them.

Similar questions arise regarding the nature of the Indian society. From the literature¹⁶ and field experience it is clear that both societies' belief in afterlife and ancestral deeds affects their present and future. In both societies the characteristic of being 'governed for protection' in the past and the present is woven into narratives and contemporary activities.

Although Indian and Cambodians live on the same continent and share a few characteristics they are by no means the same in all respects. To understand these differences, particularly to understand their perception of history, field work became an integral part of the study.

Interviews were conducted with the people associated with the conservation projects. Contacts were made with the Indian conservation team, the Archaeological Survey of India (A.S.I), and members of their Cambodian counterpart, Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA). The participants were selected mainly due to their association with the sites under examination and their vast knowledge of the conservation and its development in Cambodia.

To understand the viewpoints of both sides, the research outline sent to each did not mention the other, so as to get an overall viewpoint of the preservation work being carried out without limiting the context. A form for officials¹⁷ was created to

¹⁶ Kasinitz, Philip. 2008. *Inheriting the City: The Children of Immigrants Come of Age*. New York: Russell Sage Foundation; Along with the authors Indian cultural background.

¹⁷ Copy attached in appendix 1.

get answers to some general questions, while other more elaborate questions with a general layout¹⁸ were modified according to the intent of the interview.

Hence this thesis tries to determine the basic conceptual understanding of the people involved in these projects, in order to bring to the forefront the relationships between them that affect conservation. Articulating basic principles of conservation through field observations, interviews and research, the project aims to compare and correlate the working methods of the two countries via heritage management. It concludes with suggestions about certain issues that have arisen.

Going back to the culture, the link between these countries, as history texts have claimed, lies in the process of ‘Indianization’. George Coedès is said to have developed the concept of the Indianized kingdom but believed it was a full and complete procedure wherein the receiving country was completely Indianized.

Indianization, however now refers to the historical spread of Indian culture beyond the boundaries of India as seen today, with many indigenous practices surviving underneath the surface. Then, ‘Was the process of Indianization a two way process?’¹⁹ How have the Khmers fared after the Angkor period? What were the temples’ architecture and construction period like? What has transpired since then? This is seen in detail in Chapter 1 with importance given to its early history, i.e. the 1st to 15th century. Particularly attention is given to understanding the Cambodian society and culture during the country’s history. In tandem, the geography of the nation has

¹⁸ Questions attached in appendix 2.

¹⁹ Pg 11, Chandler, *A History of Cambodia*.

also played an important role in its fortunes. The location has aided in the arrival of new practices, trade with its neighboring countries and many other aspects of its growth and fall. This is explained in the geography section and precedes the early history section to allow the reader to get a bearing of directions and place names.

The Post Angkor history is covered in Chapter 2, separate from the early history, as it plays a major role in formation of the Khmer society as seen today. The attitudes of peoples and the organizational characteristic are highly influenced by the practices from the 15th to 20th century.

Chapter 3 provides a detailed architectural description of the three temples for the case study. Chapter 4 introduces the A.S.I and gives a brief description of the organization and its work. It also covers the criticism it received for Angkor Wat, the praise for Ta Prohm and the pride in having landed a third project in the country. The chapter also covers the interviews conducted with the Indian team and presents their views through a cultural mindset.

After this, a detailed account of the work carried out by the Indian team on the first two temples is explained so as to allow the readers to understand why these particular decisions were carried out. Technical details are tied back to the A.S.I's work approach in Chapter 5.

The Cambodian management body, APSARA has been studied and presented in Chapter 6. This covers their perspective, a brief outline of how the organization works, their views on the past and how it is being perceived by the Cambodian residents in the area.

Although the author has little background in sociological studies, an attempt has been made to cross the cultural study with the preservation disciplines. Aspects of heritage management are examined by the nature of the individual countries' culture and compared to gain a better understanding of how problems arise, and how they might be addressed. This explained in Chapter 7, which also gives a perspective on the cultural influence seen in the way these organizations conduct their work and themselves in the field. Concluding comments with answers to the questions framed in the beginning are included in the final chapter.

CHAPTER 1: THE GEOGRAPHY AND EARLY HISTORY OF CAMBODIA

Introduction

Located in Southeast Asia, Cambodia is landlocked on three sides by equally historically rich neighbors, namely Thailand on the West and Northwest, Laos in the North and Vietnam on the East. As important as the geography of the nation is in understanding its history, so is history in itself, in understanding the society. From Paul Mus, L.P Briggs, George Coedes, Claude Jacques, Michael Vickery, Ian Mabbett and David Chandler,²⁰ many scholars have researched and written about Cambodia. They have written extensively about the 2000 years of Cambodian history beginning from prehistoric periods, and gone on to consider the Angkor era, the French Colonial period of conservation and protectorate, the politics of the Khmer Rouge, and the UNDCP elections up until the 21st century.

This chapter will focus on the early history, i.e. the Pre-Angkorian and Angkorian period covering the 1st to 8th century and 8th to 14th centuries respectively. It also covers the topographical features of the country along with that of the Angkor complex. The geography of the nation precedes the history section to provide an overview of the activities that shaped the nation.

²⁰ All notable scholars of South-East Asia's society and culture.

A. Geography of the Nation

Cambodian geography²¹ is not often treated extensively in historical texts, which focus on the country's main geographical features, the Tonle Sap Lake and the Basaac and Mekong River systems. The country covers an area of nearly 181,035 square kilometers (69,898 sq. miles) and lies generally only about a 100 meters (~ 329 feet) above sea level. It is characterized by a low central plain surrounded by uplands and low mountains. Transitional forested plains extend outwards and rise up to 200 meters (650 feet) above sea level. Being within the tropical zone, the country experiences a warm to hot climate year round.

To the north of the plain is a sandstone escarpment (a major quarry in earlier centuries), which forms a southward-facing cliff stretching more than 320 kilometers (200 miles) from west to east. It rises abruptly above the plain to heights of 180 to 550 meters (600 to 1,800 feet). This cliff marks the southern limit of the Dângrêk Mountains. These mountains on the northern rim of the major lake adjoin the Korat Plateau and also mark the boundary between Thailand and Cambodia. From the northeast flows the well-known Mekong River, east of which the transitional plains gradually merge with high plateaus and forested land extending into neighboring Laos and Vietnam.

To the southwest of the central plains lie the Krâvanh (Cardamom) Mountains and the Dâmrei (Elephant) Mountains, forming the second highland region of the country. They are oriented in a northwest-southeast direction. This largely

²¹ From Kerrigan, Loreen. 2006. *The Atlas of Cambodia: National Poverty and Environment Maps*. Phnom Penh, Cambodia, unless specified otherwise.

uninhabited area covers much of the land area between the Tonle Sap and the Gulf of Thailand. Phnom Aoral is located in the Cardamom Mountains and is the highest peak of the country rising to 1,813 meters above sea level. The region to the south is a fairly narrow lowland coastal plain separated from the central plain by the aforementioned highlands.



Figure 6: Cambodia with its neighbors and identifiable topographical features;
Source: www.worldmaps.net

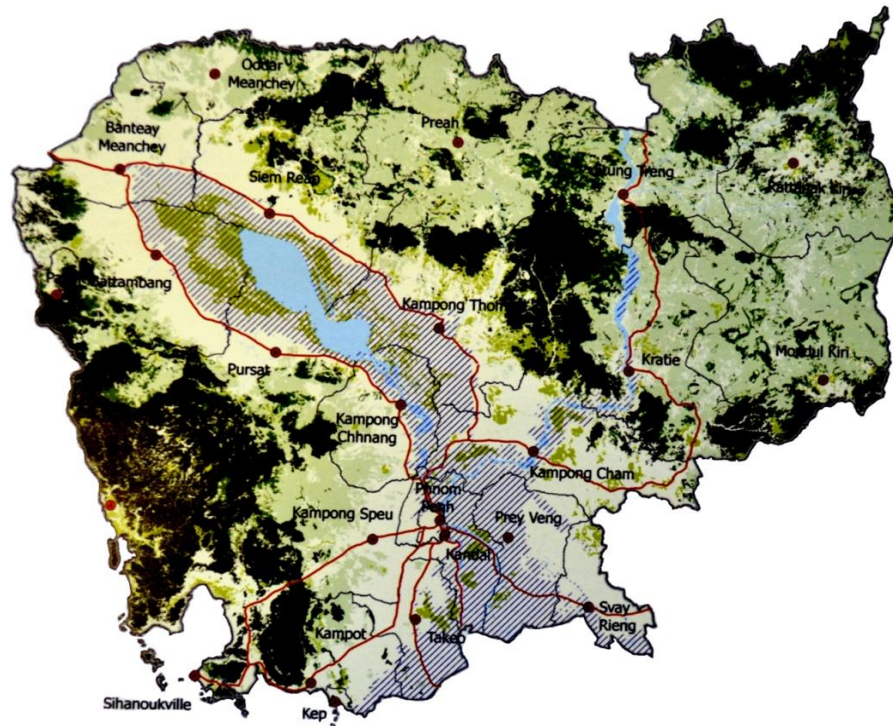


Figure 7: Topography in shade relief of the country with the extending lake boundaries; Source: Kerrigan, Loreen. 2006. *The Atlas of Cambodia*.

i. Importance of Water within the Country

The water network is an important factor in the study of the country, as much of its historical construction revolved around the proximity to water systems in the region. The distinctive feature of the country, the Tonle Sap Lake measures differently depending on the seasons (Figure 7 and 8). During the monsoons (wet season- June to October) the Lake expands to about 24,605 square kilometers (9,500 sq. miles) from its normal area of around 2,590 square kilometers (1,000 sq. miles- i.e. during the dry season- November to May). Situated in the central

plain region, the water makes the neighboring provinces serve as the food basket of the country due to the rich and fertile alluvial soils.

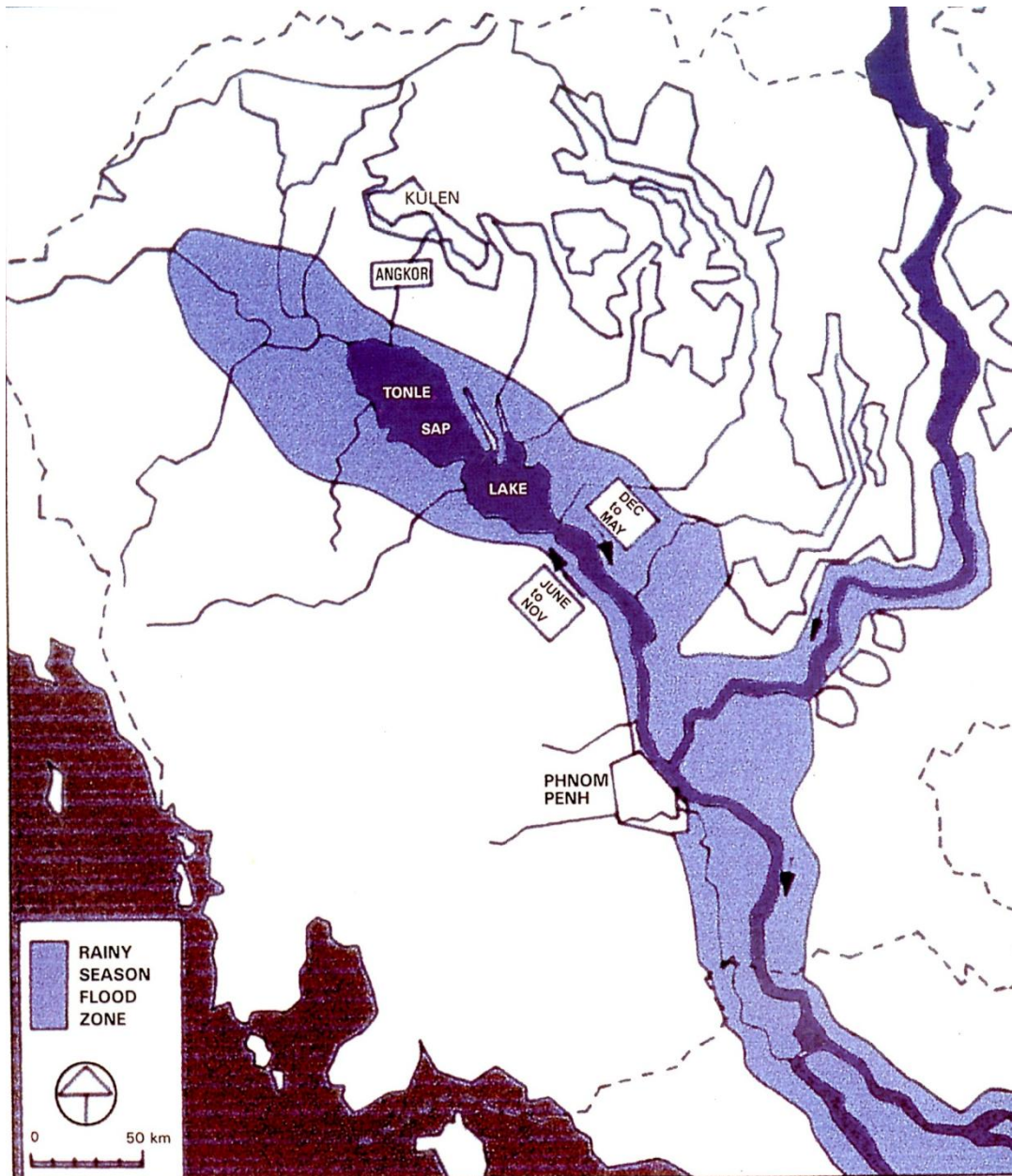


Figure 8: Approximate extent of the seasonal flooding of the Tonle Sap Lake; Source: APSARA, *Angkor, A Manual for the Past, Present and Future*.

The second feature, the Mekong River crosses Cambodia from the north to the south and is one of the most important resources for the people. It provides silt for agriculture and fish for dietary purposes. Similar to the great lake, this too has two seasons, flooding during the wet season and subsiding in the dry season.

The flow of water *between* these two major water systems is also very important. During the rainy season, the pressure of water flow of the Mekong River travelling from its source in Mt. Guozongmuchu, China is the greatest, thus the direction of flow is to the northwest along the Tonle Sap River into the Tonle Sap Lake. Whereas during the dry season, the Tonle Sap River reverses the direction and flows southwest back towards the Mekong.

ii. Historical Connection of Water and Land

The earliest evidence of life was seen in the Mekong River basin as indicated by the oldest archaeology sites. The gradual move of this mainly fishing and trading community towards the central plains of the country is generally taken to mark the independence the country sought from being a tribute paying nation to the major kingdom to its far north (China) and other neighbors. This also marked the transition of the country from having numerous chiefdoms into one kingdom and into the Angkor Era, i.e. from up until the 8th century until the 14th century.

The suitability of the Angkor region is marked by its proximity to the Tonle Sap Lake, and the rivers and on being in the most fertile part of the country.²² The gradual slope from the northwest mountains towards the Tonle Sap made it even ideal

²² Referenced from Pg. 53, Chandler, *A History of Cambodia*.

for the dry seasons, as it allowed the Khmer to construct water retaining structures, such as the *baray*'s (reservoirs) and canals, that were filled during and after the rains. This allowed for more than two seasons of rice, permitting exports that caused the kingdom to flourish.

Up to the 14th century, most of the Angkor region was accessible by river systems that continued to be used well into the 19th century. These geographical details are to aid in understanding the history of the nation, the movement of the kingships, the trade, and the internal and external conflicts.

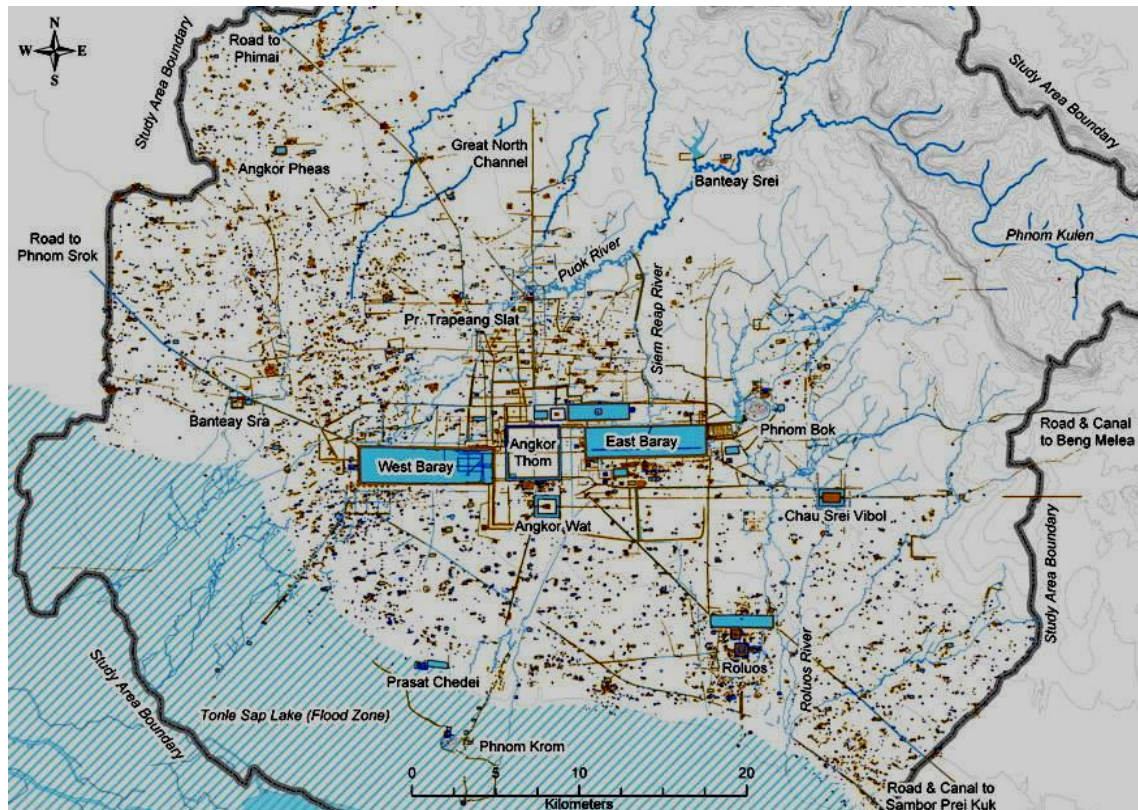


Figure 9: This 2007 archaeological map highlights Angkor as a vast landscape of habitats inextricably linked to water resources, which have been widely used during the first half of the life of the city. This is part of a radar and LIDAR image in hope to determine the urban life of Angkor. © Evans et al., PNAS, 2007; Source: Delphine Bossy, Futura-Sciences, <http://www.futura->

B. History through Culture

i. Pre-Angkorian Cambodia

a) Prehistoric Period

Data relating to the prehistoric periods is scarce and scattered, yet the presence of inhabitants in caves at Laang Spean in the north-western parts of the country is confirmed through carbon dating to as early as 4200 B.C. Human remains from 1500 B.C provide the earliest evidence of prehistoric Cambodians. Where these people originated is still debatable. Some scholars theorize early Cambodians were part of the waves of immigration through the region from the east and north.²³

Little is known through written records or inscriptions about the daily lives after the ‘cave periods’, yet the ceramic pottery that remains indicates little change in since then. Cambodian clothing has been described as unimportant in early Chinese accounts, where the people are recorded as being ‘naked’. Houses seem to have been raised above ground accessible by a ladder. Groups of houses might have transformed to circular, fortified villages in a fashion that is similar to the other inhabitants of the region in and around 1000 B.C.²⁴ Agriculture might have revolved around rice and root-crops. None of this can be described for certain as these are not recorded

²³ Pg.9, Chandler, *A History of Cambodia*.

²⁴ Pg.10, Chandler, *A History of Cambodia*; Highlighted also in David Chandler, *The Land and People of Cambodia* (New York, 1991) , Martine Herz, *A Short History of Cambodia* (N.Y, 1958) and A. Dauphine Meunier, *History du Cambodge* (Paris, 1968).

accounts, but information can be gained from archaeological evidence and travelers' accounts.²⁵

Although archaeologists and historians like Paul Mus, George Coedes and others have provided a great deal of information through their field studies of these sites, the recognition of the prehistoric sites in the region is overshadowed by the importance of the Angkorian era.

b) The Indianization Process

The notion of changelessness first dissolves in the phenomenon now popularly known as Indianization, when the elements of Indian culture recorded by the French scholars were selected and absorbed in a broader narrative over a period of more than 1000 years. In this period,²⁶ South Indian culture was brought into the region mainly due to the influx of Indian traders' enroute to China and their eventual settlement in the region (Figure 10). This shows what one might call colonization by a culture but might not imply power usurping or forced change in societal ways. The traditions that have been adopted and modified to suit the Khmers included the use of Sanskrit, the Indian hierarchical court methods, Hinduism and folk religion. For example, religious traditions such as following the monsoons cycles in appeasing gods, and in the agricultural cycles was something that was similar in both cultures. Before the Indian culture was absorbed more perpetually, the Cambodians were considered to be

²⁵ Pg. 10, Chandler, *A History of Cambodia*.

²⁶ The process of Indianization extended over centuries and could be seen up until the end of the Angkor era, although an exact date of when it began is uncertain, many scholars note it began in the first 500 years CE; Pg. 11, Chandler, *A History of Cambodia*.

worshippers of the elements of nature, a tradition that was reinforced by adopting the ideas of their Indian counterparts.²⁷

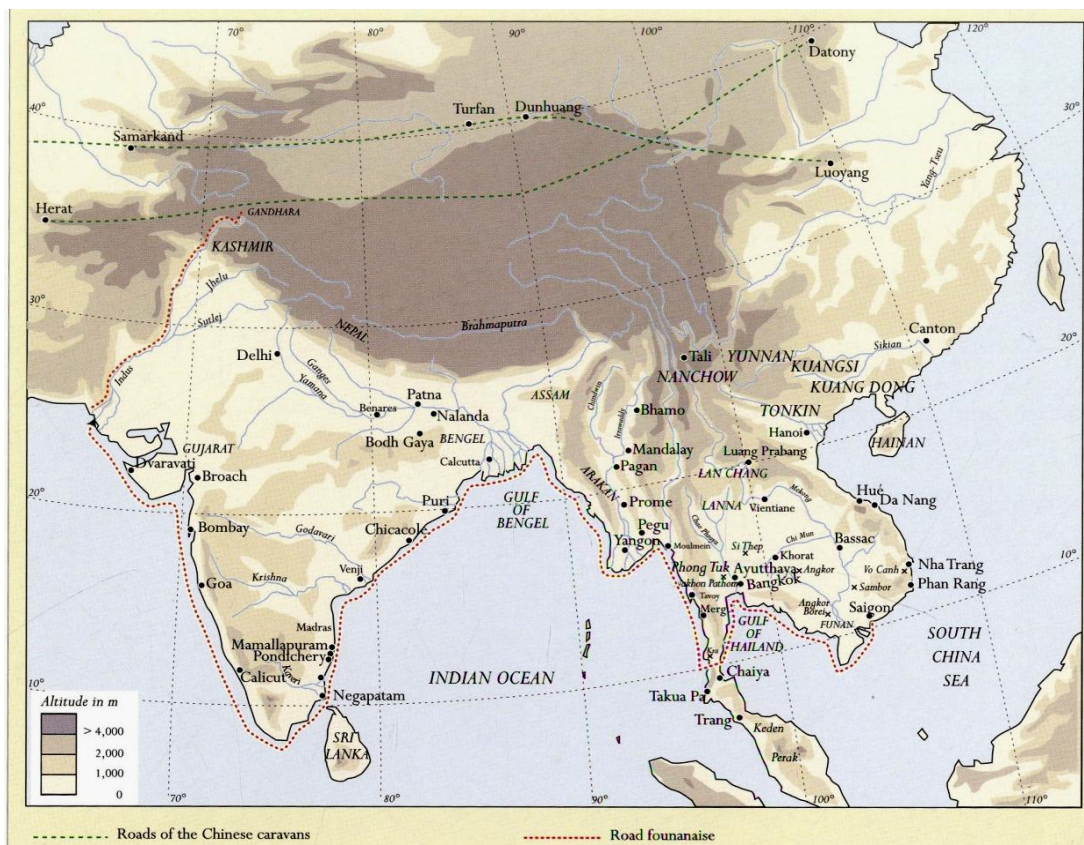


Figure 10: Sea and river routes charted between India and Cambodia; Source: Jacques and Lafond, *The Khmer Empire*.

Despite the heavy influence of India through its provision of a language, a pantheon, a social hierarchy mechanism, subsequently the Buddhist religion, ideas of universal kingship and new ways of looking at politics, sociology, architecture, astronomy, aesthetics, it cannot be said that Angkor was an Indian city.

Myths and legends mark the beginnings of the history of Cambodia as a kingdom. One South-Asian legend has it that a Brahman married the dragon princess

²⁷ Pg. 11-13, Chandler, *A History of Cambodia*.

(*nagi*) of the state, giving it its name ‘Kamubja’ and subsequent building of its first capital in the south-west regions mainly near water.²⁸ This myth has been repeatedly used and the name is the only one seen in a written inscription from the 9th century, while other myths go on to indicate the marriage between the sun and the moon.²⁹

c) The Funan Period

The best and earliest evidence of a kingdom or state is through many of the traveler’s records from visiting Chinese officials. They support the Brahmin dominated kingdom with Indianized practices but Khmer culture. Archaeological evidence from excavations of a city near the Vietnamese village of Oc-Eo in the Mekong Delta during World War II by Louis Malleret supplements these accounts.³⁰ These indicate the presence of a trading city, and also indicate the trade network between India and China through the mythical state of Funan (Figure 11). This early historical period is thus often termed the Funan period due to the prevalence of the Chinese evidence.³¹

Literary evidence has shown the possibility of a location of these sites near a small hillock named Ba Phnom in Southeastern Cambodia, east of the Mekong.³² Although no literary evidence has proved definite existence of a ‘kingdom’ as such, it has been supposed that small chiefdoms in the region would have banded together or

²⁸ Pg. 13, Chandler, *A History of Cambodia*.

²⁹ Ibid.

³⁰ Pg.14, Chandler, *A History of Cambodia*; Miriam T. Stark. *Transition to History in the Mekong Delta: A View from Cambodia*. International Journal of Historical Archaeology, Vol.2, No.3 (1998): 175-203.

³¹ Pg. 14, Chandler, *A History of Cambodia*; a principality could have been named as Funan by the Chinese and recorded as offering tribute to the Chinese emperor on an irregular basis between A.D 253 to 519.

³² Pg14-15, Chandler, *A History of Cambodia*.

were part of one and sent tributes to the mightier Chinese kingdoms for protection and trade.³³

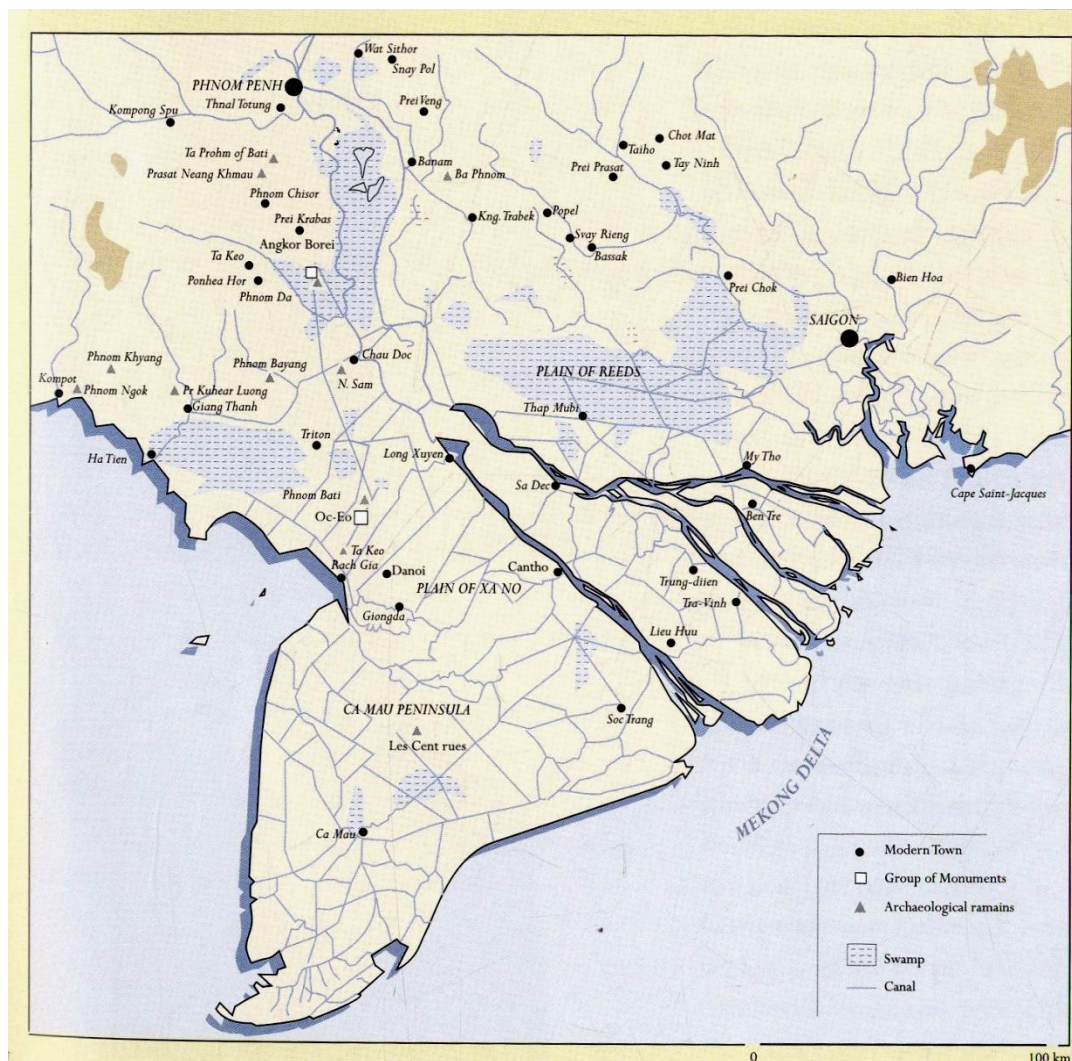


Figure 11: Map of Funan charted from texts in and around the 6th c., it shows the density of canals in a flat region; Source: Jacques and Lafond, *The Khmer Empire*.

The 7th and 8th centuries mark the development of irrigation facilities through the integration of small, dry-rice growing and hunting and gathering tribes into a

³³ Pg.15, Chandler, *A History of Cambodia*.

systematic agriculture.³⁴ Inscriptions from this period and later aerial photographs of the Mekong Delta, indicate there would have been in place a drainage canal system used both for irrigation and transportation.

These pre- Angkor period societies usually had an overlord who controlled the lands and his subjects and provided them with protection against enemies (mainly rival overlords) and the forces of nature. The suffix to their names '*Varman*' that meant armor suggesting protection is thus common to the time and region. The Indian predilection of getting protection from the gods (Shiva in particular) and the necessity of Indian Brahmins to assist them in this effort would have been common for at least the 5th and 6th centuries.³⁵

Not all segments of the societies followed the rituals of appeasing Shiva through land and other personal devotions. Buddhism also appears to have flourished in the Funan era. Donations and performing rituals and sacrifices to attain freedom from one's past resonated in both the religions. These acts also included the building of temples to achieve redemption and this path to glory gained importance in the country's history. These pre-Angkor communities would have carried out these acts for the general good of their community rather than just individual gain, especially to promote agricultural productivity.

Earlier discussion of the blending of the cultures is also seen in the blended images of deities and rituals, revered and practiced by the 'kings/chieftains or

³⁴ More likely a family or community oriented system that can be traced up to the 20th c.; Pg. 15, Chandler, *A History of Cambodia*.

³⁵ Pg.16-21, Chandler, *A History of Cambodia*.

overlords' of the period. The political center of the Khmer empire that lasted until the 6th century is on and near the Ba Phnom hillock and what is today's capital city Phnom Penh. Trade between India and China was the major activity and included principally Buddhist religious objects.³⁶

The use of Sanskrit in official records began in A.D. 613,³⁷ an indication of another presence of influence from South India, where the use of Sanskrit was common in manuscripts, temple hymns, and chants. Khmer³⁸ was also used, but with the onset of Sanskrit usage, an informal divide was created in the Cambodian society.³⁹ Subsequently both Khmer and Sanskrit inscriptions dating from the 7th century onwards provide insight into the way the Cambodian society functioned. Sanskrit was used to address the gods and recount the good deeds of those in power. The Sanskrit inscriptions are poetry, while the Khmer inscriptions in prose for the people protected by them. The latter have recordings of temple construction, administration, treasuries, jurisdiction and duties of the slaves, taxes to be paid, and sometimes ended with a curse to frighten the people into carrying out what has been inscribed or preached.⁴⁰

Evidence of the common man or the society in these inscriptions provides only an incomplete picture. The suggestions are that they served in return for protection

³⁶ Pg. 20-21, Chandler, *A History of Cambodia*.

³⁷ Pg. 21, Chandler, *A History of Cambodia*; P.N. Jenner (1980). *A Chronological Inventory of the Inscriptions of Cambodia*. Honolulu. The earliest datable inscription found in Cambodia, K. 600 was discovered at the site of Angkor Borei by French Scholars in 1935.

³⁸ The earliest Khmer inscription was incised in A.D. 611, Pg 21, Chandler, *A History of Cambodia* other sources mentioned in footnote #31.

³⁹ Pg. 21, Chandler, *A History of Cambodia*.

⁴⁰ Ibid.

and redemption and were seen as engaged, but different from slaves in the western world. The lack of information in the inscriptions on the various sects or *Varna* of peoples' gives no leads to the division of the society, or to who built the temples. There is also no mention of whether their inscriptions were incised in perishable materials like wood or other non-perishable materials.⁴¹

By the end of the 7th century an extensive stone complex of *Isanapura* suggests the developing society. The lack of written Chinese records of the 8th century provides no help in understanding the situation. Further growth in technology, population, the altered patterns of local authority and periods of peace seems to have permitted the center of gravity of the country to shift northwards in the vicinity of present day Angkor.⁴² Settlements expanded to and around the lower basins of the Tonle Sap, Mekong River basins and were later documented by researchers as a consolidation of small kingdoms, referred to as the *Chenla* (Figure 12).⁴³ At the end of the 8th century (Figure 13 and 14) it is clear that the once coastal chiefdoms now moved inward and thrived on wet-rice agriculture⁴⁴, with a hierarchical society following much of the ideologies from India in architecture, sculpture and inscriptions.

⁴¹ Pg. 22-27, Chandler, *A History of Cambodia*.

⁴² Pg.17-20, Chandler, *A History of Cambodia*.

⁴³ Pg.26, Chandler, *A History of Cambodia*; *Chenla* was a name given to the settlements by the Chinese.

⁴⁴ Not much has been found in terms of archaeological evidence to link these theoretical assumptions to any site, yet recent studies conducted by archaeologists in the Angkor region and beyond it have shown the presence of sites underneath the urban fabric. This although needs hard evidence. The argument presented here is based on what the author has learned from attending the IPPA conference in January 2014 in Siem Reap, Cambodia.

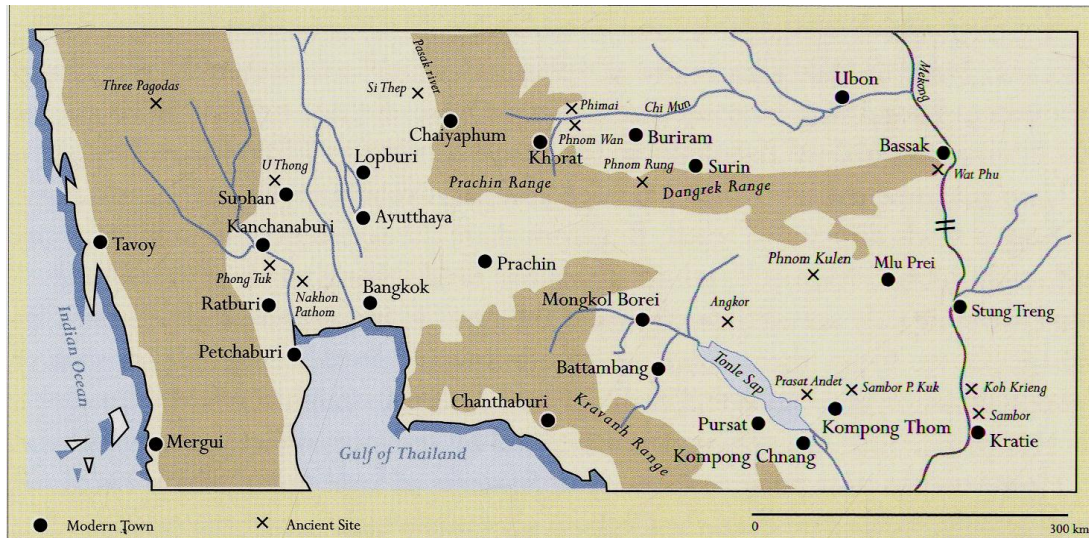


Figure 12: The ‘Chenla’ period sites charted with ancient sites around modern towns;
Source: Jacques and Lafond, *The Khmer Empire*.

Much of these comparisons of its similarity to Indian culture are still being used by scholars trying to unravel the sparsely written history of this period. The Indian team at work has also been using this to its advantage to demonstrate their knowledge on the subject of temples that were built during and in the later Angkor era.⁴⁵

⁴⁵ The International Coordinating Committee (ICC) is a body formed under the UNESCO chaired by FRENCH and Japanese ambassadors, and consisting of all the countries involved in the preservation of temples within the Angkor Park. These countries are to report in two meetings held by the ICC on their progress and future work proposal including technical details, once in June, which is termed as a technical session. The next meeting in December, is primarily for the ambassadors or other visiting dignitaries of countries and also to give out decisions made via discussions on the proposals presented in June. Each ICC technical session presentation by the Director General of the A.S.I involves a brief comparison of the two countries’ shared history; As seen in the 16th, 17th and 18th Technical session reports, <http://www.unesco.org/new/en/phnompenh/culture/tangible-heritage/icc-angkor/>

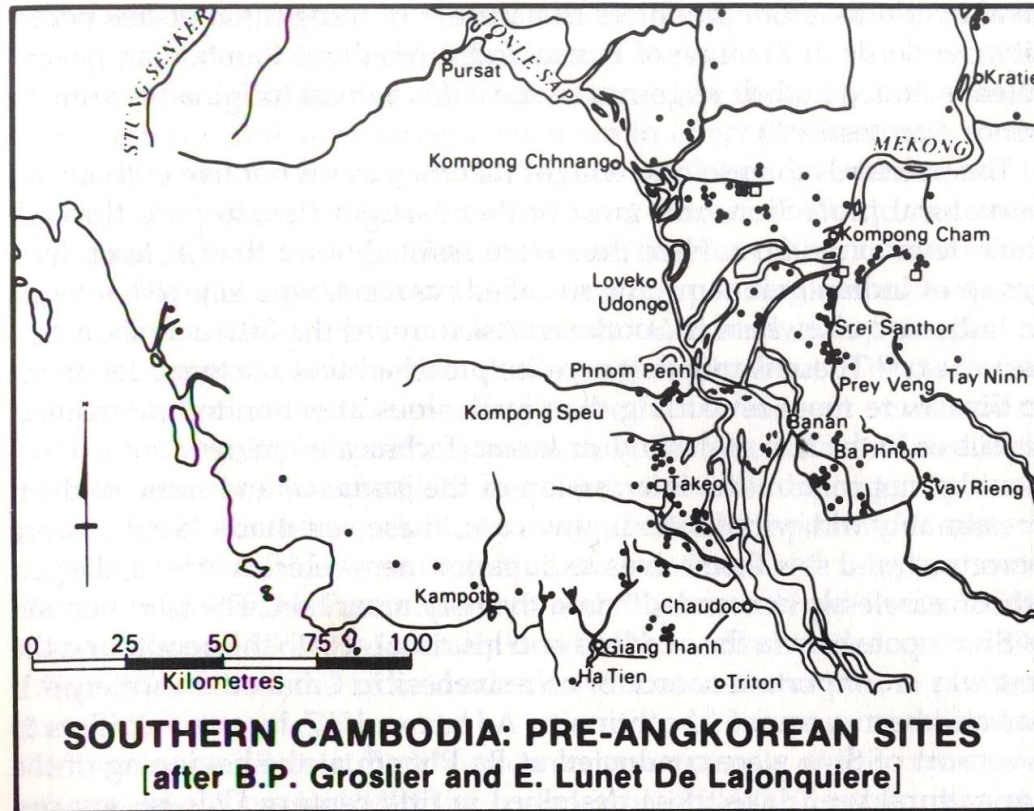


Figure 13: Pre Angkor Sites in the southern part of the country, from where it is supposed to have shifted to the Angkor region; Source: David Chandler, *The History of Cambodia*.

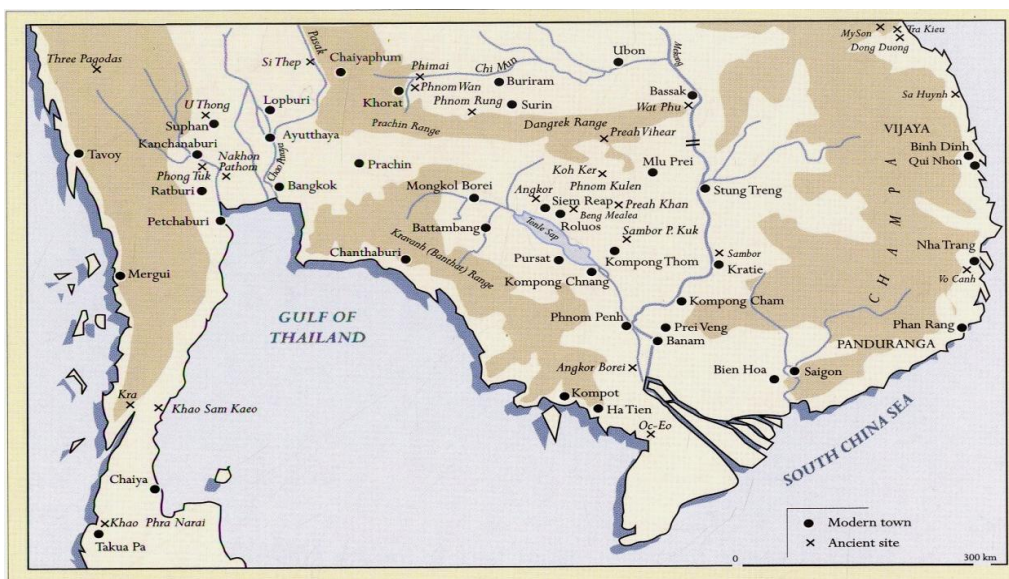


Figure 14: Modern Towns around ancient sites in the 9th and 10th centuries; Source: Jacques and Lafond, *The Khmer Empire*.

ii. Angkorian Cambodia (802-1431)

The surviving inscriptions in the temples provide a variety of insights and a timeline for what is considered to be the greatest period in Cambodian history, the Angkor era. Although the actions of the kings and their courts, the temples and its activities are well recorded, there is little information about the rural population and their daily lives.

The Angkorian society is supposed to have had periods of infrequent and short dominations by different kings.⁴⁶ Certain inscriptions made during these periods provide information on individual temples, their patrons, and workers attached to them. Taken together these form historical facts, but they do not provide much information on the context or much about the patrons. Bas-reliefs, statues, artifacts and the temples from the later years of the Angkorian period though are sometimes rich indicators of fashion trends, warfare and everyday life, like those deciphered from the 13th century Bayon temple.

Jayavarman II is believed to be the founder of the kingship at Angkor⁴⁷. This has been questioned by many due to lack of documentary evidence. The only inscription found is at *Sdok Kak Thom* of 1050, indicating his sacrificial rituals in the Kulen Mountains.⁴⁸ His presence is mainly indicated at *Hariharalaya* (present day

⁴⁶ Pg. 29-34, Chandler, *A History of Cambodia*.

⁴⁷ One must not here that the name Angkor, is what the region with high density of temples has been named by the scholars mainly due to the Angkor Wat, which again might not be its real name and something that the locals gave it when they were helping the French scholars map the region and its temples.

⁴⁸ Pg. 34-36, Chandler, *A History of Cambodia*.

Roluos⁴⁹) and marks the beginning of centuries of temple-building and the practice of a *Devaraja* (a divine king) cult to be associated with the kingdom for a long time.⁵⁰

Indravarman (r, 877-89) was the first king recorded to embark on a series of temples and inscriptions, and the construction of reservoirs and irrigation works for his subjects and the divine. He is said to have carried out these works to indicate his powers as a god-king, to appease the gods, and honor his ancestors. Many temples during his reign were built with brick and other easily disintegrating materials like wood. His presence was mainly felt in the Roluos region⁵¹

The three temples that are the case studies in this thesis were built after the rule of Indravarman and a few of his successors. The shift from brick to stone was seen in the late 9th century.⁵² Under his rule the center of focus moved to what is now the Angkor complex, beginning with the construction of a temple atop Phnom Bakheng⁵³ close to the later Angkor Wat.

As the region offered natural hillocks, it provided a setting the king desired to have for his temple-mountain⁵⁴ with surrounding reservoirs. These early temples

⁴⁹ A present day small town south of Angkor Wat with mid-to- late 9th century temples.

⁵⁰ Pg. 36, Chandler, *A History of Cambodia*.

⁵¹ Pg.37, Chandler, *A History of Cambodia*. The Roluos region and then the Angkor region began mostly as an attempt to build a new city with a main temple built by the ruling king, at the centre of the city. Many of these new regions or cities built by different kings were to show their superiority in the area and command respect from their subjects and consisted of mainly temples and other structures like rest stops and hospitals. These regions led to the construction of the Angkor region, which till now was not 'built'.

⁵² Pg. 37-38, Chandler, *A History of Cambodia*; shows transition in temple construction from brick and wood to primarily of stone

⁵³ Phnom means hill; most of the names of the temples are those given to them by French explorers in the 20th c.

⁵⁴ A temple-mountain concept is where the temple represents the mythical mountain of Mt. Meru, which is surrounded by lakes. It is generally in a pyramidal shape and has openings in each of the four directions.

honored many principles of the Hindu tradition symbolically through the number of towers and stairways. Yasovarman, Indravarman's son, is also supposed to have constructed rest houses for religious hermitages in Roluos and southeastern Cambodia. With his temple being almost in the center of the complex of small temples and reservoirs, this king is credited with having established 'Yasodharapura',⁵⁵ which is essentially the Angkor complex as seen today.

This was followed by a century of changing rule and practices. The 10th century provided little inscriptions or other materials recording the social and cultural life of the kings and their subjects. A few inscriptions from temples further away from this new center show shifting with a not-yet firmly established capital at Angkor (Figure 15).⁵⁶ From the engravings and inscription in these distant temples it is known that Buddhism was taking an increasingly developed stance, was tolerated and even fused with *Shaivism* to an extent in daily religious and court practices.⁵⁷

⁵⁵ Pg. 39, Chandler, *A History of Cambodia*. Recent archaeological evidence points out that the temple complexes in it could have been mini-cities with subjects living and serving within it. Although this is still a speculation, it cannot be determined either whether the city was part of the Angkor or surrounded it. The inscriptions only provide evidence as to state that these temples were built by the kings to show their connection to the gods and not whether they lived in them.

⁵⁶ This mainly indicates to the presence of the reservoirs and other structures like the rest houses and small hospitals built by earlier kings like Indravarman in the region, when they would try to extend their boundaries by building beyond their capitals.

⁵⁷ Pg. 40-42, Chandler, *A History of Cambodia*.

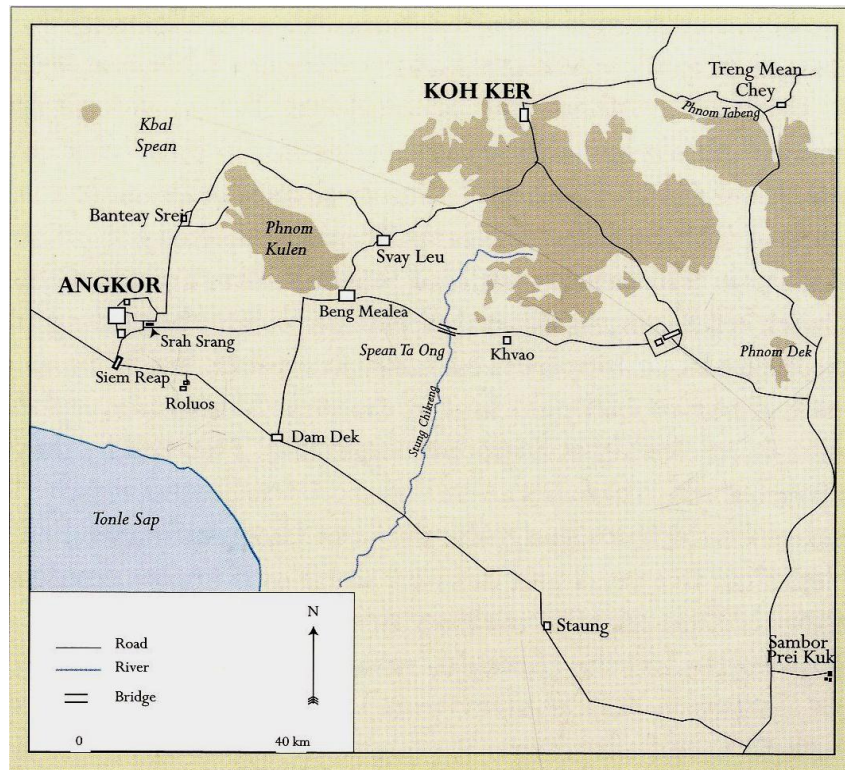


Figure 15: Map showing road network linking Angkor with Koh Ker via a crossroads where the road branches east towards Preah Khan of Kompong Svay; Source: Jacques and Lafond, *The Khmer Empire*.

All this is supposed to have ended with growing bureaucratic power and the reign of Suryavarman I in the early 11th century. With the growing population and the kings' intense warfare, the Angkor reign now extended into central Thailand (earlier known as the Siam). Evidence of urbanization and foreign trade became more prominent during his reign. He is also said to have forcefully taken control of all political issues and had particular disdain for those who had amassed fortunes and often considered them threats.⁵⁸

Suryavarman I is credited to have built far and wide in this period, with contributions to famous temples like the Preah Vihear, Phimeanakas and Phnom

⁵⁸ Pg. 42-44, Chandler, *A History of Cambodia*.

Chisor. Preah Khan (of) Kompong Svay⁵⁹ was also part of his many building campaigns. The king is said to have resided and ruled from this region in the beginning of his reign and not the Angkor complex. After his death in 1050, the remaining decades of the 11th c. were relatively static with the same established societal values being enforced by his sons. The region of Preah Khan Kompong Svay is not mentioned in inscriptions after his reign and is mainly attributed to iron production until the 12th c.

The last years of the 11th century, however, were years of changing monarchies, fragmentation and inner turmoil. These highlighted the role of the rural residents who would probably have never left their village boundaries or not have known the king, yet remained dependent on him for a good climate and wellbeing.

At the beginning of the 12th century in Yasodharapura a new rule began, one that was to last for a 100 years at Angkor. The third major ruler of this period, Suryavarman II was a unifying monarch (Figure 16) who built the Angkor Wat. Like his predecessors Yasovarman and Suryavarman I, he brought in rigorous changes in administrative policies, kingship and also expanded territory and manpower under his control.⁶⁰ His major contribution to an extensive campaign of construction is Angkor Wat. The temple complex is unprecedented in the entire Khmer architecture and

⁵⁹ Explained in detail in Chapter 4.

⁶⁰ Pg. 49-51, Chandler, *A History of Cambodia*.

highlights intricate craftsmanship. It would not have been completed in his lifetime, as has been considered by many scholars.⁶¹

Through later inscriptions, it is known that several coups occurred within the kingdom, along with a few rebellions by the ‘forest people’ in the northwest section of the kingdom. Tributes to China are still recorded from neighboring kingdoms, which suggest fragmentation of the Angkor.⁶²

Angkor Wat brought in many changes to the region including many further new constructions in the area by successive kings. They built their own temples and added fortifications, gates, canals and reservoirs. It would have evolved as the capital and remained so up until the 14th c. Although, not much is not known of the population size it is said to have been the home of the king and new speculations have been made as to archaeological evidence being present inside the complex.⁶³

⁶¹ This and many other temples in Khmer architecture during the Angkor era were built to highlight the ‘god-king’ concept. These had images of deities that were worshipped in either the Buddhist or Hindu religion. Many scholars have surmised that these deities ‘faces’ took on the facial characteristics of the king or sometimes the temples had images of the king alongside it. The temples as the name suggests were places where the city would go for pilgrimages, a ritual that is still seen today.

⁶² Pg. 52-53, Chandler, *A History of Cambodia*.

⁶³ From the IPPA conference in January 2014, the author attended.

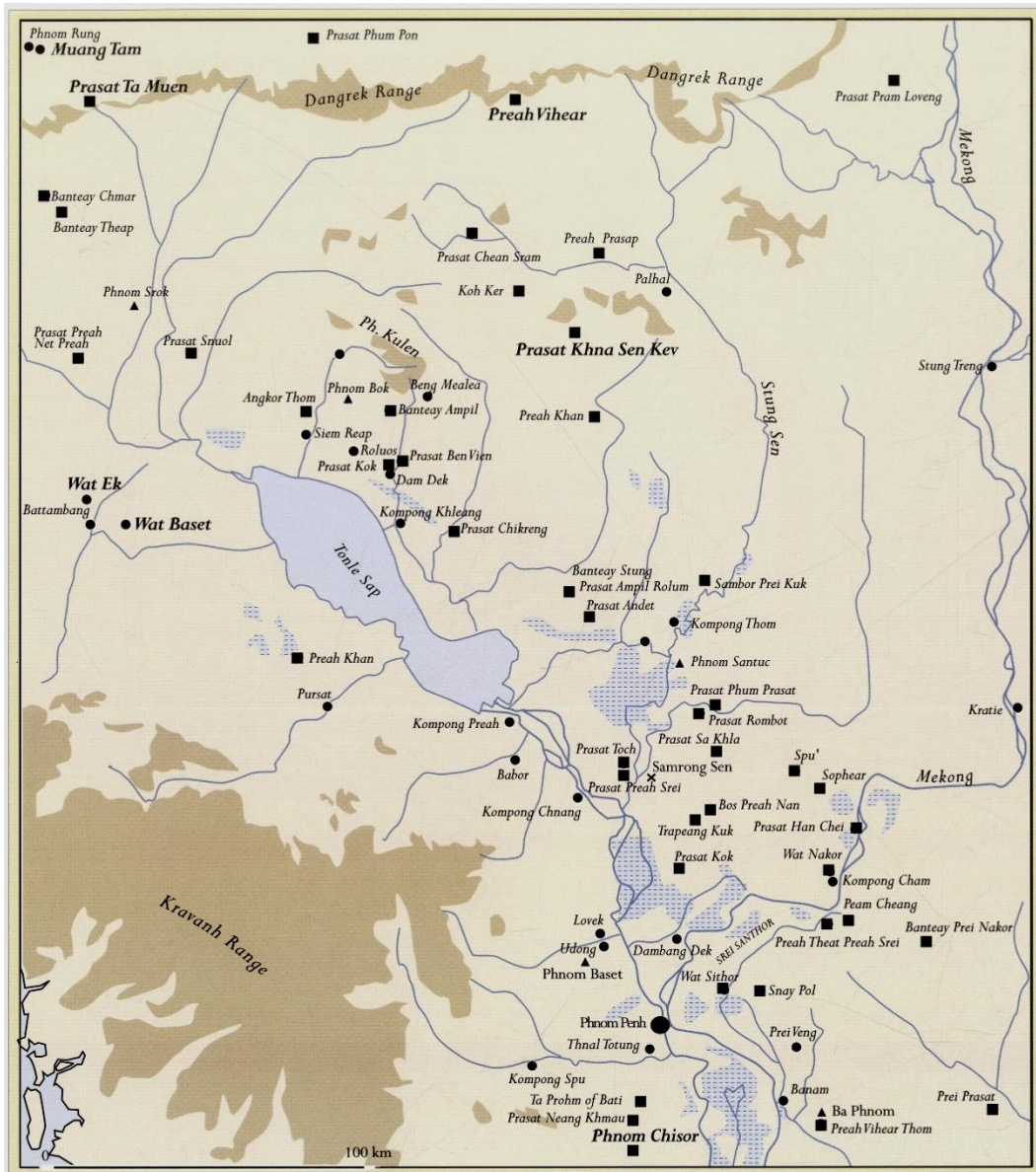


Figure 16: The Khmer empire during Suryavarman I's reign charted from sites named on inscription; Source: Jacques and Lafond, *The Khmer Empire*.

Not much is known of the period after the death of Suryavarman II (1150) until the beginning of the Jayavarman VII's (1182) reign. The latter is said to have lived away from Angkor at Preah Khan (in) Kompong Svay, before his reign, which then could have probably been subservient to the major city of Angkor itself or one of its

trading partners.⁶⁴ Jayavarman VII's arrival marked the onset of Mahayana Buddhism and he had a particular interest and integrating with it the Cambodian ideas of kingship. This form of Buddhist kingship formed the ceremonial basis for Cambodia, practiced until the 1970s and can be seen in parts today also. Inscriptions record Jayavarman VII's inclination to redemption, performance of meritorious acts and other similar Hindu rituals, but more aimed at inclusivity of the people in these acts. His ascending to the throne had little to do with the political upheaval before or even with the poor conditions of the period. He is definitely linked to the transformation of the kingdom (Figure 17).⁶⁵

⁶⁴ Pg-195-197, Claude Jacques, *ibid*

⁶⁵ Pg. 55-58, Chandler, *A History of Cambodia*.

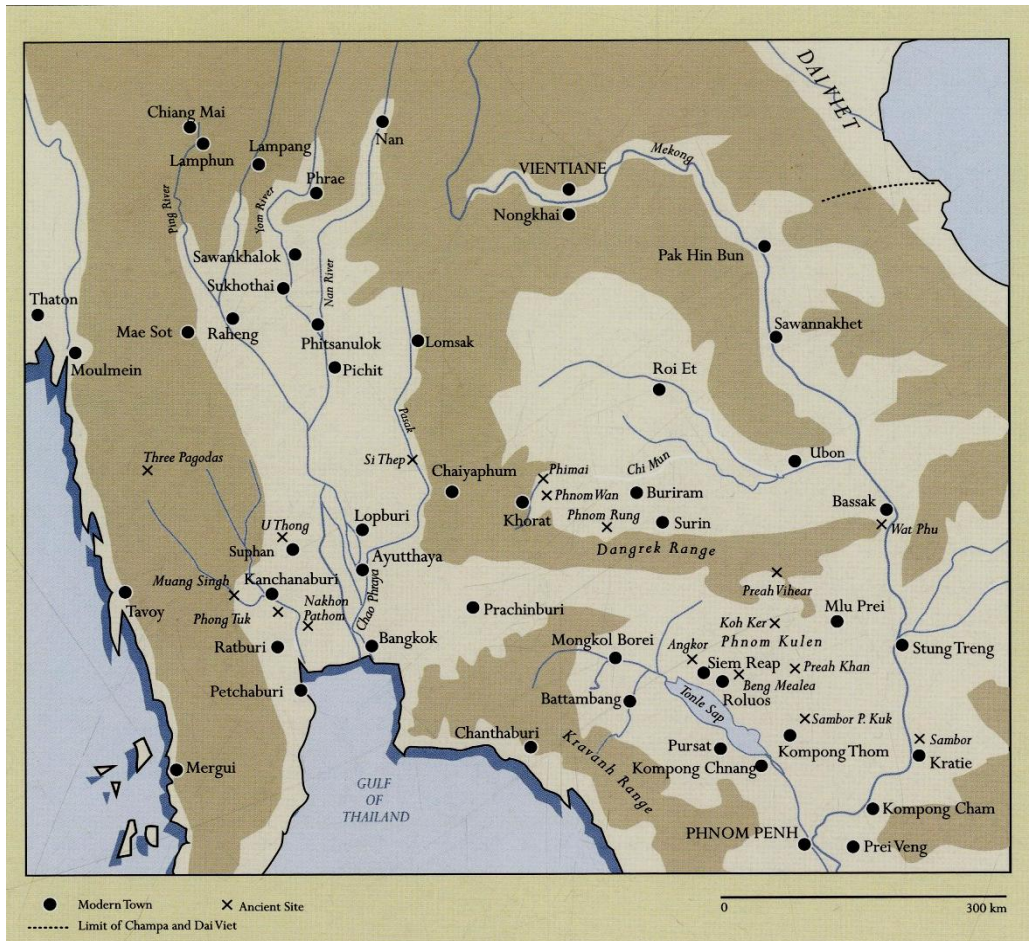


Figure 17: The Khmer empire under Jayavarman VII; Source: Jacques and Lafond, *The Khmer Empire*.

His inclination towards Buddhism apparently led him to be modest while carrying out his duty, and to deliver himself and his people from suffering. This led to many construction projects including that of roads reservoirs, temples, rest houses, and hospitals throughout the kingdom. This also could be for other reasons, like accelerating his response to uprisings and invasions and facilitating access to areas rich in resources for export. Due to his numerous projects, soon building resources

became scarce and workmanship sloppy. Yet under his rule, building activities were at a height never seen before or later.⁶⁶

During his reign many temples were constructed for monastic purposes. Well-known temples in Jayavarman VII's rule include Ta Prohm, Preah Khan (devoted to his father and victory over the Chams and a sister temple to Ta Prohm), the northern *Baray* (Jayataka), Neak po'n, Prasat Prah Stung, Bayon, entrance gates of Angkor Thom, stone walls surrounding the city, the causeway of giants outside the gates. Additions to earlier structures include the temples of P'mai in northeast Thailand and Preah Khan in Kompong Svay. He tried to centralize people, bringing workers from the peripheries into the service of the state.

Representations of the common man's life in bas-reliefs (Figure 18) in some of his temples provide a respite from earlier representations of historical events. Ranging from battle scenes, to normal ones of ordinary people buying, selling, eating, gambling, picking fruits, curing the sick, or just travelling, the reliefs are a start but do not extend to inscriptions. They have found a place on the walls of major temples, like Bayon. This brought about a change in styles from the Angkor Wat period, but also discontinued earlier traditions.⁶⁷

Unfortunately many Buddha carvings and images in temples constructed during his reign especially those seen at Ta Prohm and Bantey Kdei were desecrated or destroyed immediately after his reign ended in the early 13th c. This occurred in

⁶⁶ Pg. 59-62, Chandler, *A History of Cambodia*.

⁶⁷ Pg. 65-67, Chandler, *A History of Cambodia*.

what some record as the reaction of the Hindu court officials to Jayavarman VII's increasing preference for Buddhism.

His break with the past, proclivity toward Buddhism, constant wars with neighbors and grandeurs of building programs brought about his downfall and the shift of the kingdom into a crisis-like situation in the early part of 13th century. This century was marred by significant movements of population, the appearance of a new religion and shifts in balance of power.

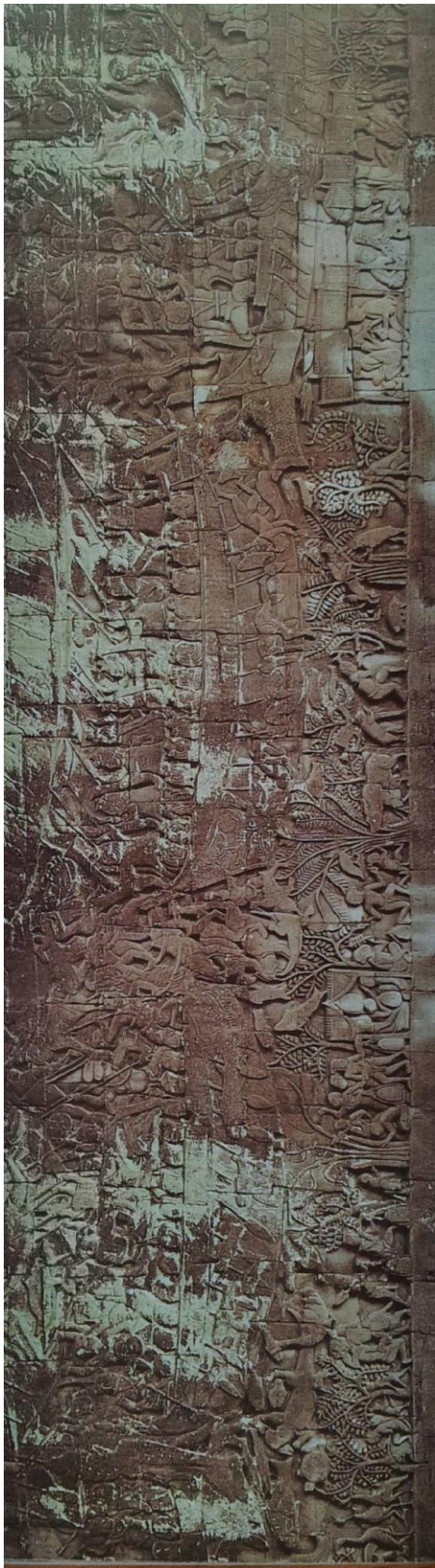


Figure 18: A bas-relief from the outermost enclosure in the south wing of the Bayon depicting a river or lake bank alternatively with forest and village scenes; Source: Pg. 100 Poncar Jaroslav, *Of Gods, Kings, and Men- Bas-Reliefs of Angkor Wat and Bayon*

Rich mythical Indian literature and iconography got easily adapted into Khmer culture during this period. Unfortunately vigorous expansion schemes died with Jayavarman VII's death leaving the kingdom's control over present-day Thailand weakened. The changing kings in the following years allowed slow trickling of other cultures and nations into the region (Figure 19 and 20). The most prominent during the latter half of the 13th century was the expansion of Chinese commercial activities along the coastal and northern mountains.⁶⁸

The most detailed accounts of the common man in this intermittent period is from Zhou Daguan's account of Angkor in 1296-97, a Chinese envoy to the state. He provides details of religion, slaves, festivals, agriculture as well as the king's (Indravarman III) excursions. The relation between the society's elite and 'slaves', their three religions including the presence of Brahmanism, declining Shaivism and rising Theravada Buddhism, the wonders of the Tonle Sap, the rainfall and agricultural season (the 3-4 rice harvests), etc. all single out a systematic society but with more of a focus on the way the elite or merchant would view the society with details lacking of the common man's shares, freedom in society and his religion.⁶⁹ Not much is known about the time after Daguan's visits and enough is left to speculation with little to no evidence.

Eventually many factors led to the weakening of the Angkor Era after at least 200 years of Jayavarman VII's death. The factors as mentioned earlier included the exhaustion of resources due to ambitious construction programs, gradual failure of the

⁶⁸ Pg. 68-71, Chandler, *A History of Cambodia*.

⁶⁹ Pg. 71-76, Chandler, *A History of Cambodia* and Zhou, Daguan, and Peter Harris. 2007. *A Record of Cambodia: The Land and Its People*. Chiang Mai, Thailand: Silkworm Books.

irrigation systems (mainly due to silting up of the *Baray*'s), the widespread appeal of Theravada Buddhism, reemergence of sea trade that reduced the inland location's charm and the repeated attacks by the Siamese from the north and also the 1432 A.D war with Siam.⁷⁰

Conclusion:

The early history encompassing mainly only the northwest region forms a transitory theory, a small idea of the society here. The common man had a reverence towards the king and was mainly involved in rice-cultivation. Monastic organizations, craftsmanship, cultural development were at a height in the Angkorian era. They begin declining once a shift occurs in the society towards a prominently market or trade based economy. Despite cultural intermingling and religious tolerance in the early history, a divide between the rich and poor is seen in the society that continues in later history.

The following chapter covers the recent historical development in the country as a whole. With power shifts, international players came into the country. Internal conflicts and uprisings begin and brings the once peaceful and prosperous country to its knees.

⁷⁰ Pg. 25, Petrotchenko, Michel. 2011. *Focusing on the Angkor Temples: The Guidebook*. [Thailand]: Amarin.

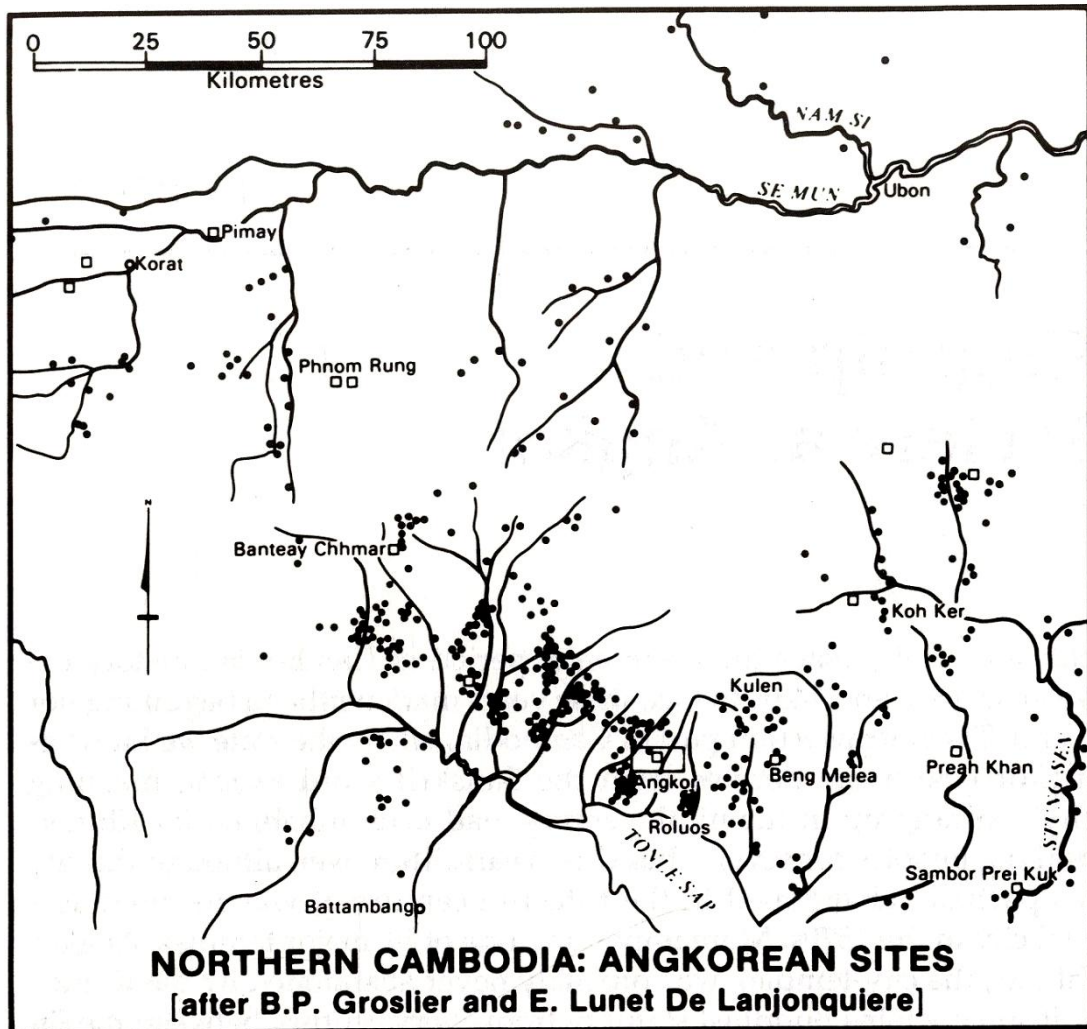


Figure 20: Angkor era sites in northern part of Cambodia, where the kingdom is supposed to have flourished the most; Source: David Chandler, *The History of Cambodia*.

CHAPTER 2: POST ANGKOR CAMBODIA UNTIL THE 21st CENTURY

Introduction

Although Cambodian thinking is connected to the country's early history, contemporary Cambodian culture has been greatly affected by that what has transpired in the last few centuries. The shift from the Angkor region to a new capitol brought in new societal attitudes that need to be understood for the course of this study. This chapter will focus on the events that transpired since the 15th century to show how they have played a major role in the cultural development of the society and the way any Khmer governmental organization would function. This mainly covers historic events within the country and concludes with an understanding of what effect this recent history has had overall.

A. The 'Middle' Period (15th-18th century)

The beginning of the 15th century marked the shift of the geographical and administrative center to Phnom Penh, although Angkor was still occupied and several buildings restored or added to in the region. The increasing power of the Thai in the west also fueled this shift. A gradual change from the rigid religious foundations and ceremonial duties of Brahmin bureaucracy also occurred, towards a more entrepreneurial focus in what seemed like a 'middle' period.⁷¹

⁷¹ Pg. 78-79, Chandler, *A History of Cambodia*.

With increasing Thai invasions and influence, many people began migrating west to Ayudhya (in Thailand)⁷² along with ideologies, texts and institutions. Others migrated southwards to Phnom Penh, where the capital of the country has remained since then.⁷³

By the late 15th century to mid-16th century, an influx of neighboring Malaysians, Chams, and Indonesians became common. These foreigners traded in the region and left behind artifacts, administrative and bureaucratic titles within the society, and certain words that are still used in the Khmer language. The Chinese traders present during the Angorian era now became part of the society via marriage to Cambodian women, while the Thai brought religious influences along with ideas and new forms of organization, new settlement patterns and new priorities. This rarely peaceful exchange of culture and religion occurred against a backdrop of frequent wars to the west of the Mekong River with Siam.⁷⁴

Geared towards developing stronger trade relations and controlling manpower rather than just agricultural land, the state of the Khmer passed through a succession of kings up to the 17th century in Phnom Penh, though whose names cannot be completely verified. During the 16th century, as Thai attacks receded, the military presence of the Cambodians diminished and the region of Angkor was left mainly un-

⁷² Ayudhya is about 417 kilometers northwest (0.62 miles) away from Siem Reap and was approximately the capital of the Kingdom of Siam from the 12th to 18th c. It is currently the capital of the Ayudhya province in Thailand.

⁷³ Pg. 79, Chandler, *A History of Cambodia*; Vickery Michael. *Cambodia after Angkor: The Chroniclular Evidence for the Fourteenth to Sixteenth Centuries*. Ann Arbor, Michigan. 1977.

⁷⁴ Pg. 80-81, Chandler, *A History of Cambodia*; This generally was around the provinces of present day Siem Reap, Battambang, Oddar and Banteay Mancheay, Pailin and Preah Vihear, all northwest section of Cambodia.

administered.⁷⁵ The 17th century was marked with constant wars between Thai-backed or Vietnamese-backed kings fighting to control the Cambodian region around Angkor and Phnom Penh.⁷⁶

Yet in these times of despair, the subjects of the king feared him and respected the monks and religion.⁷⁷ Changes in warfare and the kingdom's susceptibility to foreigners ushered in another whole new dimension of change in daily life. Due to growing tensions from both east and west of the Angkor region, the ruling Cambodian king turned for help to the Spanish (who resided in the Philippines) inviting Spanish imperialism in the end of the 16th century. With it began a period in which not only the Chinese and Indonesian, but also the Japanese, Arab and Portuguese were involved in the region for trade. By the first half of the 17th century, the Khmer society became a maritime kingdom.⁷⁸

These foreigners were soon followed by the Dutch, French and the British. These Europeans first wished to trade for the extraordinary riches, like precious stones, silk, cotton, lacquer incense, ivory, rice, fruit, rhinoceros and buffalos. Later the Europeans wanted to gain control over the region. During the late 17th century not much mention is made of Angkor because of the trade activities in the southern region of the country. With the onset of the European travelers, accounts of the region focus on the lifestyles of the rich and the trading community but little mention is made of the rice-farmer. All that can be said is that they paid taxes, passed on knowledge from the

⁷⁵ Pg.81, Chandler, *A History of Cambodia*.

⁷⁶ Pg.82-86, Chandler, *A History of Cambodia*.

⁷⁷ Pg.82-83, Chandler, *A History of Cambodia*; referred from Gaspar Da Cruz's reports on his missionary work.

⁷⁸ Pg.85-88, Chandler, *A History of Cambodia*.

older to the younger generation and were dependent on their principal officials. The society in the 17th century was controlled by rich bureaucrats who were fighting amongst themselves for power and stooping to low levels to obtain it, while the poor stuck to their beliefs and traditions.⁷⁹

Chronicles and anecdotes from the lives of the kings and his subjects characterize the kingdom at the end as a ‘variegated, conservative and hierarchically organized society, consisting of a few thousand privileged men and women, propped by an almost invincible wall of farmers, in which great emphasis was placed on rank and privilege and behavior thought to be appropriate to one’s status.’⁸⁰

The growing interest amongst the upper echelons of society to usurp power, meant that outside aid was taken either from the east or the west, depending upon whom the rich shared a better relation. This eventually meant that by the advent of the 18th century, international trade had declined, Phnom Penh became a backwater, and Vietnamese troops captured most of the coastal regions and subsequently the trade. This made Cambodia a virtually unknown, poor state.⁸¹

The 18th century is considered among one of the dark periods of Cambodian history with large scale dynastic instabilities, foreign invasions, and civil wars. The presence of the Thai dominated this century, with the next being taken over by the

⁷⁹ Pg. 89-94, Chandler, *A History of Cambodia*.

⁸⁰ Pg. 94, Chandler, *A History of Cambodia*.

⁸¹ Pg. 88, 94-98, Chandler, *A History of Cambodia*.

Vietnamese, sometimes even both, and eventually with the French putting it into a state of constant political disruption.⁸²

B. 19th and 20th centuries

The constant invasion and change in power left a void in governance. The people still believed in following a leader appointed by the king and they did not express a preference whether it was the Vietnamese or Thai. All they expected was that the ruler would provide them the ‘protection to plant, harvest and survive’.⁸³

In the 19th century, most of the population was spread throughout the country. The ethnic Khmer speaking people were mostly occupied with rice farming, while a smaller number were involved in a monastic or official role. Commercial and minor industrial tasks were handled by minority groups like the Chinese, Muslims, descendants from Champa, and the *Kuoy* who were from the northern part and smelted iron ore.⁸⁴ The French recorded that Indianization was partially still visible, chiefly in the countryside in costumes, eating habits, and the habit of carrying goods on their heads. To the French even the Cambodian musical instruments and jewelry followed Indian styles.⁸⁵

Until the mid-19th century, the countryside lacked the ability to control irrigation and agriculture that was common in the Angkor period. Apart from the

⁸² Pg. 97-116, Chandler, *A History of Cambodia*.

⁸³ Pg. 98, Chandler, *A History of Cambodia*.

⁸⁴ Pg. 100, Chandler, *A History of Cambodia*.

⁸⁵ Pg. 11-12, Chandler, *A History of Cambodia*.

family affairs and Buddhist events, the people rarely organized themselves and did so only 'for a short term in response to a specific need'.⁸⁶

Uncertainties in the political administration and structure were factors that allowed the Vietnamese and the Thai to slowly take control over the disintegrating feudal and kingship system. Increasing their dependence on either of their patrons only made Cambodia a weaker and vulnerable state, ready to be annexed by the next power providing 'protection'. Around the 1860s the French became the next patron. The ruling Prince Duang, controlled by the Thai, wanted the French to eliminate them and the Vietnamese influence. This marked the beginning of a European colonial period in the country.⁸⁷

The French began establishing their protectorate by 1863,⁸⁸ which lasted up until 1953. The French were more concerned with holding onto their power rather than assisting the colony. However, the colonial administration brought political and economic stability. It also delineated boundaries for the protectorate and provided rudimentary 'Westernized' mechanical changes in Cambodian life especially in towns (Figure 21). Improvements were more obvious under the French than in any of the other earlier 'civilizing' efforts.⁸⁹

Under a series of puppet kings, the political, economic and social stability of the region benefited France more than Cambodia. This only reinforces the earlier

⁸⁶ Pg. 126, Chandler, *A History of Cambodia*.

⁸⁷ Pg. 113-135, Chandler, *A History of Cambodia*.

⁸⁸ Pg. 99, Chandler, *A History of Cambodia*.

⁸⁹ Pg. 137-139, Chandler, *A History of Cambodia*.

thinking that a sub-strata of society should work for the higher-ups in producing goods (mainly rice, pepper, etc. but this time in surplus for export under the French) in return of protection. Yet this continuity of tradition gradually saw change and went beyond just rice farming and feuding.⁹⁰



Figure 21: The French's first task in its new protectorate was to map its boundaries;
Source: Map Library Olin Library, Cornell University.

⁹⁰ Pg. 138, Chandler, *A History of Cambodia*.

The ‘discovery’ or one could say rediscovery of the ruins of Angkor sparked interest in the small land known as Kampuchea. When Henri Mouhot wrote about the Khmer in the 1860’s, the French did not mention much about it in their affairs of the state. While carrying out other political activities and amidst settling a rebellion the French got a chance to bring the region of Siem Reap and Battambang under their protectorate of ‘Cambodia’ in 1906. The exhibition in Marseilles coincided with the retrocession of these two provinces from the Thai (they were under the control of the Thailand since 1794) as well as bringing ‘puppet’ kings like Sisowath to the throne for their purposes.⁹¹

The splendor of Angkor Wat was the main draw for the French. Given the fact in the past 100 years the Thai did little to colonize Cambodia, or restore the temples, the region was more or less ethnically Khmer. Revenue wasn’t especially high from either Cardamom or forest products from Cambodia, so that the Angkor region was generally ignored. The return of this region to the ‘Srok’ (country) of Kampuchea brought the king favor from his officials and subjects from far and wide.⁹²

French scholars and Cambodian workers toiled over the first half of the 20th century restoring the architectural legacy, making it France’s one and maybe only strong point to remain. The regained region of Battambang, in addition to the historical richness of Siem Reap, proved a prosperous deal, providing the bulk of Cambodia’s rice exports.

⁹¹ Pg. 149-150, Chandler, *A History of Cambodia*.

⁹² Pg. 150, Chandler, *A History of Cambodia*.

Automobiles, typewriters and other inventions brought into Cambodia along with the Vietnamese officials to prepare reports in French, proved more to be temporary changes that were seen mostly within the boundaries of the only ‘city’, Phnom Penh. Elsewhere the situation was almost the same as before the French arrived, only with heavier taxes and almost no modernization. The French ‘residents’ of the provinces did little to bring about change, yet with little modern amenities this exotic location soon became another posting for many officers.⁹³

Most of this historical narrative is from a French perspective. This makes it difficult to understand the Cambodian point of view. The local society was hardly given any importance, and the only government hierarchy that mattered to the foreigners was that needed for revenue collection.

The active interests of the French in bringing changes in the education and political system through language ‘Romanization’ and governmental shuffles led to changes. A sense of nationalism developed in Cambodia thinking, similar to elsewhere in other French colonies. Events, including small scale revolutions (with the Japanese in the background), a change in power and the reentry of the Vietnamese marked the end of the century.⁹⁴

With the declaration of the independence (the first⁹⁵) from French in 1945, done with the backing of the Japanese, the Cambodian began facing anti-monarchist feelings from the educated monks (monasteries or *sangha*) and government officials.

⁹³ Pg.151-152, Chandler, *A History of Cambodia*.

⁹⁴ Pg.154, 156 & 160-169, Chandler, *A History of Cambodia*.

⁹⁵ The second more lasting one was in 1953.

The independence was short, as the government officials once again brokered agreements with the French, who now controlled finance, defense and foreign affairs, leaving the most volatile-political matters and matters of the State in control of the crumbling monarchy. Political parties were for the first time allowed to form, although they all had one thing in common, to 'be led by a prince, have fear of a neighboring country... loyalty to the monarchy'⁹⁶. The divide among the parties was in their ideology, of being a democrat or a conservative. Democratic patrons generally included the local officials, teachers and members of the *sangha* (monastery), while the conservative were more likely those who still endorsed the traditional economic patronage system. This political upheaval through the end of the 20th century plunged the country into conflicts that set Cambodia back more than 100 years.⁹⁷

The constant bickering among the democrats and those supporting the monarchy (the leftists) took place against a backdrop of increasing disturbance from communist backed guerilla bands. However neither side paid little attention to the societal structure. In the 15 years after the final independence from the French in 1953, the king who abdicated his throne to enter politics, now became the Prince (Sihanouk) and controlled the office but slowly began losing control over the 'kingdom'. These changes in power did no good for the common man, as s/he still paid overbearing taxes, and were in no way in contact with the official who was

⁹⁶Pg. 174, Chandler, *A History of Cambodia*.

⁹⁷ Pg. 170-178, Chandler, *A History of Cambodia*.

assigned to a province. This left the people powerless in a socialist government with center of power in Phnom Penh.⁹⁸

Amidst the backdrop of the Vietnam War, the Cold War, a growing distrust of Sihanouk's economic policies and ideologically conservative politicians, the Cambodian economy destabilized and power shifted into the hands of the newly elected French-educated Khmer candidates. These candidates had an upper hand in removing the prince from office, which led him to later asking for help from the Vietnamese once again.⁹⁹

During all of this turmoil, a communist faction of the democrat patrons, who hated the privileged royalty and the corruption and injustice, began gaining popularity. Representing the masses, Saloth Sar¹⁰⁰, Ieng Sary, and others like them gained importance among the intellectuals, monks, students and the now shut down democrats who tried working by rules.¹⁰¹

With Sihanouk's decline, mainly due to his position that Cambodia remain a neutral state (becoming anti-USA, which led to no military aid) and also tried to nationalize the economy,¹⁰² the communists gained strength. This finally gave into a series of violent tragedies. Beginning with the coup of Sihanouk to Lon Nol (then

⁹⁸ Pg. 188, Chandler, *A History of Cambodia*.

⁹⁹ Pg. 189-198, Chandler, *A History of Cambodia*.

¹⁰⁰ To be known later more popularly as Pol Pot.

¹⁰¹ Pg. 198, Chandler, *A History of Cambodia*.

¹⁰² This made the elite more powerful in doling out policies and selling out rice surplus to highest bidders, mainly the Vietnamese and causing major grievances due to forced collection of rice, to the common man who then began uprising against Sihanouk; pg.192-193, Chandler, *A History of Cambodia*.

prime minister) trying to drive the North Vietnamese out of the country¹⁰³, the declaration of the country as a republic nation, and the corruption of the army officers, the country now lay more scattered than ever. No mention of the temples or conservation work can be seen in any of the changing political agendas. Apart from Phnom Penh, much of Battambang and a few provinces, not much was administered by the Khmer Republic, as the nation's leading party was known then. The rest of the country had become unsafe and was in the hands of the hardened democrats, now recognized as communists.¹⁰⁴

Now known as the Khmer Rouge, the communists from the forests had begun what reached a full scale of rebellion and usurpation of power in 1975 on April 17. The people expecting a reprieve from the corrupt and inefficient Khmer Republic were definitely not ready for what they were about to get.

C. The Khmer Rouge and Pol Pot

Much has been written about this era and there are interviews with the man who carried forward many of the militant actions. Tribunals have been held to expose the wrong-doing. Yet the horrors of the 3 years, 8 months and 20 days from that day in April 1975 are ingrained in the mind of every mature Cambodian.

The country was renamed the Democratic Kampuchea from 17th April 1975 until January 7th 1979. The communist rebels attained control and gained the opportunity they had worked for so hard in the last 5 years. Saloth Sar rose against

¹⁰³ With whom Sihanouk had made an agreement of being anti-US and allowing the gun smuggle through his country.

¹⁰⁴ Pg. 204-208, Chandler, *A History of Cambodia*.

Sihanouk.¹⁰⁵ Money, markets, formal education, Buddhism, books, private property, diverse clothing style and freedom of movement were abolished. All aimed to favor the poor while removing all impediments to national autonomy and social justice. The cities were depopulated when literally over 2 million people were pushed into the rural hinterlands to an unknown fate. Only the families of the top officials of Cambodia's communist party, Communist Party of Kampuchea (CPK) and some soldiers of the Khmer Rouge remained in Phnom Penh.¹⁰⁶

This revolution was supported early on by many who thought it was necessary to change the governance of Cambodian society, which had become highly corrupt and unreliable. Those who opposed the revolution favored not just the poor or the elite, but were the middle class people who desired stability.¹⁰⁷ People who were suspected of any wrongdoing were quickly interrogated and executed; the charges were not always proven right. Apart from these executions, people began to die of starvation, extra work load, and diseases.¹⁰⁸

Deep mistrust of anyone regardless of who they said they represented led to the downfall of the revolution. Backed by military and political support from China, Pol Pot came out in the open, declaring the party's existence, with a complete disclosure of its birth, growth and future plans (Figure 22 and 23). It contained veiled warnings

¹⁰⁵ He had actually enlisted support from the communists, to drive out the Khmer Republic and get back his seat, but little did he know that he would soon become their dummy for representation to the world, then ousted and finally exiled in 1976.

¹⁰⁶ Pg. 209-216, Chandler, *A History of Cambodia*.

¹⁰⁷ Pg. 211, Chandler, *A History of Cambodia*.

¹⁰⁸ Malaria and malnutrition were the most common, which could not be treated due to unavailability of foreign/western medicine; pg. 216, Chandler, *A History of Cambodia*.

to South Vietnam and contradictory future promises of an increased population and increased productivity.¹⁰⁹

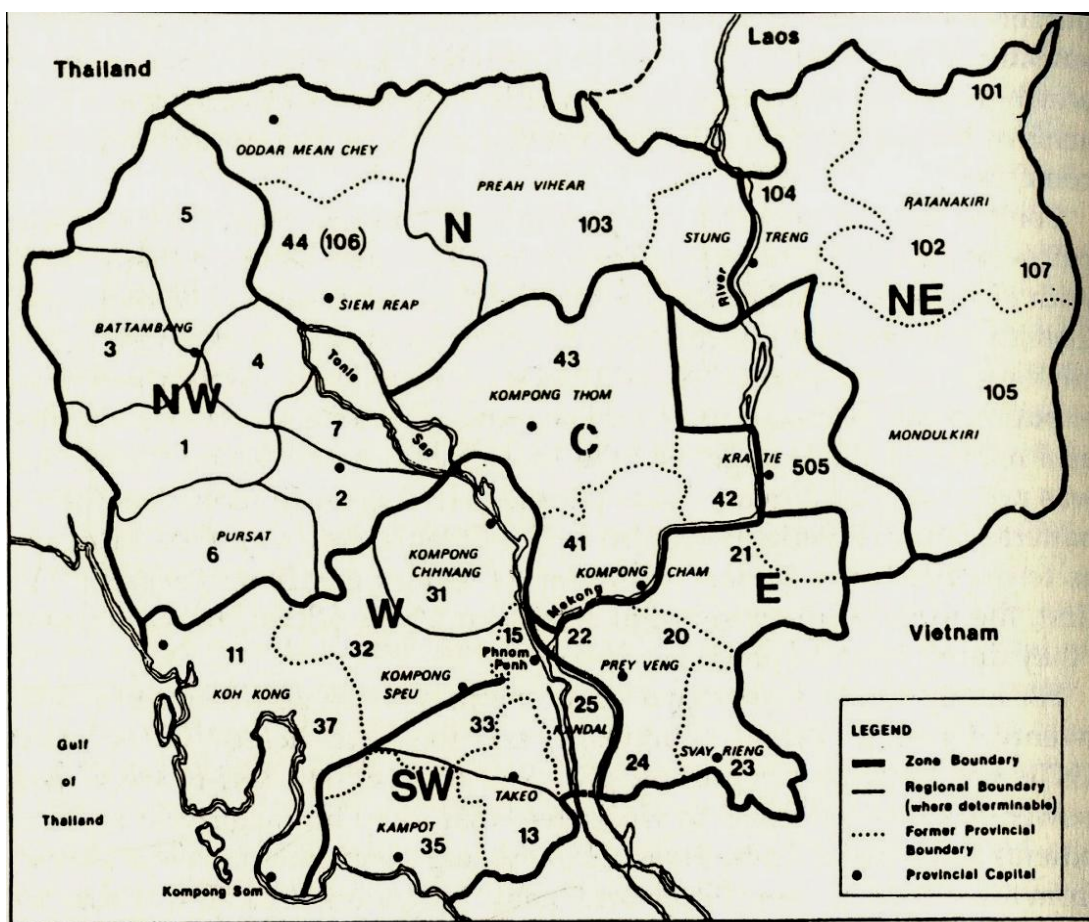


Figure 22: Zones and administrative divisions of Democratic Kampuchea made by the DK after 1975; Source: David Chandler, *The History of Cambodia*.

¹⁰⁹ Pg. 220-221, Chandler, *A History of Cambodia*.



Figure 23: Democratic Kamuchean soldiers at the Thai frontier in 1980; Source: David Chandler, *The History of Cambodia*. Photo by James Gerrand.

The Vietnamese, finally up on its feet,¹¹⁰ (Figure 24) mounted a military offensive while strengthening their own ties with the communist Chinese, thus giving rise to the next phase of Cambodian colonization under the political party called the People's Republic of Kampuchea (PRK). It was led by one of CPK's former regiment commanders Hun Sen. Internal conflicts and confusion among supporters of the Democratic Kampuchea Party led to many of its soldiers and officials deserting and joining the Vietnamese-backed PRK. The Democratic Kampuchea Party (DK, earlier known as the CPK) had begun feeling the international pressure when the misdoings of the regime became public knowledge. Invitations issued by the new regime to members of the international community failed to be productive, which gave Vietnam a free hand in capturing the capital and causing a humiliating end to the DK's regime.¹¹¹

¹¹⁰ Mainly due to the backing by the Soviet Union; Open-conflict with Vietnam was a possibility since April 1975, but political aggressions deepened between Pol Pot and the Vietnamese Communist Party from July 1977 and climaxed on Dec 25th 1978, when Vietnamese troops mounted several offensives mainly in the northeast regions of Cambodia blocking several major roads leading to and from Phnom Penh.

¹¹¹ Like many other regime leaders before, Pol Pot too fled the scene as well as other high ranking officials based in Phnom Penh; Pg. 222-225, Chandler, *A History of Cambodia*.



Figure 24: Map indicating the position of army bases of the US and Vietnam as well as major roads, railroads and capitals during the Vietnam War; Source: Map Library Olin Library, Cornell University.

The new government consisted of CPK members who had defected to the Vietnamese, while the young communist guerillas retreated into the northwestern

regions of the country. As the only party to be recognized as legitimate, it promised to respect human rights, including freedom of opinion and association, but it promised no political freedom. The early 1980s were yet not completely peaceful, as the citizens now felt the pressure of the Vietnamese and Vietnam's influence in their daily lives. Many educated Cambodians opted to leave the country, while pre-DK activities began to re-surface, including family farming, market trade and Buddhist rituals. Famine still plagued the country, due to untended rice fields and was exacerbated by the droughts. Not much was left after the occupying Vietnamese troops consumed the food.¹¹²

Slowly life was built back by the PRK, community land ownerships and currency reintroduced, but no taxes were collected and no men were enlisted in military service. Loss of the educated people and a growing mistrust of a foreign power (Vietnam) running the state gradually meant that the PRK began losing support among the masses.¹¹³

Unfortunately the Khmer people were not lucky enough to have gotten away from DK, as they fell right back into the lap of misery. PRK's alliance with Vietnam and mistrust of major foreign powers;¹¹⁴ aided in the slow resurrection of the CPK, Sihanouk and other members of the earlier regime. This led to more war that caused more Khmer deaths than ever. This occurred mainly in the north-west regions of the

¹¹² Pg. 227-231, Chandler, *A History of Cambodia*.

¹¹³ Ibid.

¹¹⁴ Read, USA and China and their supporters, Pg. 230-233, Chandler, *A History of Cambodia*.

country, including the Angkor Region, which the CPK wanted to keep under its control.¹¹⁵

In 1989 the Vietnamese troops withdrew¹¹⁶ and the new government appealed to foreign countries for financial assistance to rebuild the nation.¹¹⁷ The withdrawal of support of both the United States and the People's Republic of China allowed other countries to offer support with the idea that new partnerships could be forged.

After July 1990, the United Nations finally intervened,¹¹⁸ assisting the creation of a temporary government until elections were conducted. These elections brought back the thousands of Cambodian refugees and a plethora of Human Rights organizations. The rural economy was still stagnant however and the country's infrastructure remained abysmal. Despite the election results, a compromise was reached to form a coalition government, between the Cambodian People's Party (CPP, and a descendent of the Republican Party) and the FUNCINPEC (a royalist party led by Sihanouk's son, Rannaridh).¹¹⁹

Since then two similar coalition governments have formed, and Cambodia was invited into the Association for South East Asian Nations (ASEAN) in April 1999, an organization aimed towards nation building and self-economic development. By the

¹¹⁵ Pg. 234-235, Chandler, *A History of Cambodia*.

¹¹⁶ Several factors led to the withdrawal of the Vietnamese troops including, the growing sufficiency of the PRK and reduced aid from the Soviet Union following the economic crisis in the USSR and Eastern Europe. The Vietnamese occupation had now become an expensive affair.

¹¹⁷ Pg. 231, 236-238, Chandler, *A History of Cambodia*; It is during this period that India responded in many ways to extend diplomatic relations with the country, ensuring economic support due to the boom in economy in South Asia as compared to Eastern Europe, mainly due to political changes happening all over the globe; Pg. 237, Chandler, *A History of Cambodia*.

¹¹⁸ Mainly due to US withdrawing support to the Communist party, DK's representation at the UN followed by China's withdrawal to support them in the northwest of Cambodia, pg. 238-239, Chandler, *A History of Cambodia*.

¹¹⁹ Pg. 240-241, 243, Chandler, *A History of Cambodia*.

end of the 1990s, Cambodia still suffered in many avenues such as that of having achieved a slow economic growth rate, and population rate too high, wide-spread corruption, low infant mortality rate and spread of diseases like HIV/AIDS. Foreign investment especially from European nations was still at a standstill due to the economic slump allowing countries like India to assert itself in the country through diplomatic channels. Despite low economic aid and growth, Cambodia was relatively at peace and not dependent on a 'predominant foreign patron'. The monarchy's future remained uncertain, while the government tried to direct its efforts to attaining revenues and rebuilding a social sector.¹²⁰

D. The 21st century

Discovery of massive oil deposits in the Gulf of Thailand that lie in Cambodia's territorial waters, Sihanouk's final resignation in October 2004, setting of a tribunal in 2006 to punish those from the Khmer Rouge, coupled with increasing tourism to Angkor, slowly marked the country's presence in the global arena, as these events were either supported or conducted via foreign financial backing. With the international community's eye on its next move the country has begun its journey under immense scrutiny.

Tourism and oil revenues have not been used yet to bring the country's poor out from poverty. And still political factions along with bureaucratic elites continue to fight for absolute power over the nation.

Conclusion:

¹²⁰ Pg. 244, Chandler, *A History of Cambodia*.

In its recent and early history, Cambodia has seen various changes in power. These were over-run by individuals or factions that have often been ‘self-absorbed, high-handed and uncompromising’.¹²¹ Most recently the political motives of socialists, communists or hard-lined democrats caused the country to be far-behind than its flourishing neighbors.

Cambodia’s past had been reconstructed by the French as a glorious one, with extensive building and political campaigns, while they (French) worked on changing its present in the late 19th and early 20th centuries. Even the modern history as it is known now is one marred with issues Cambodia has had with Thailand and Vietnam, which is a reflection of its history with each of them. Moving ahead with a conservative ethos wherein most of the people looked backward rather than forward to demand change proved to be a volatile form of nationalism.

The widespread misbalance in the community, between its rich and poor, the army and the farming community is ubiquitous now. Whether the riches from its new and foreign interests will reach the poor is unknown. Despite all of this the ‘resilience, talents and desires of the Cambodian people, and the ability to defy predictions, suggest that a more optimistic assessment of their future’.¹²² The power within them to bring change when they require it and to bring in masses to support a cause is one that applies to the conservation industry as well.

¹²¹ Pg. 296, 4th edition of Chandler, *A History of Cambodia*.

¹²² Pg. 300, 4th edition of Chandler, *A History of Cambodia*.

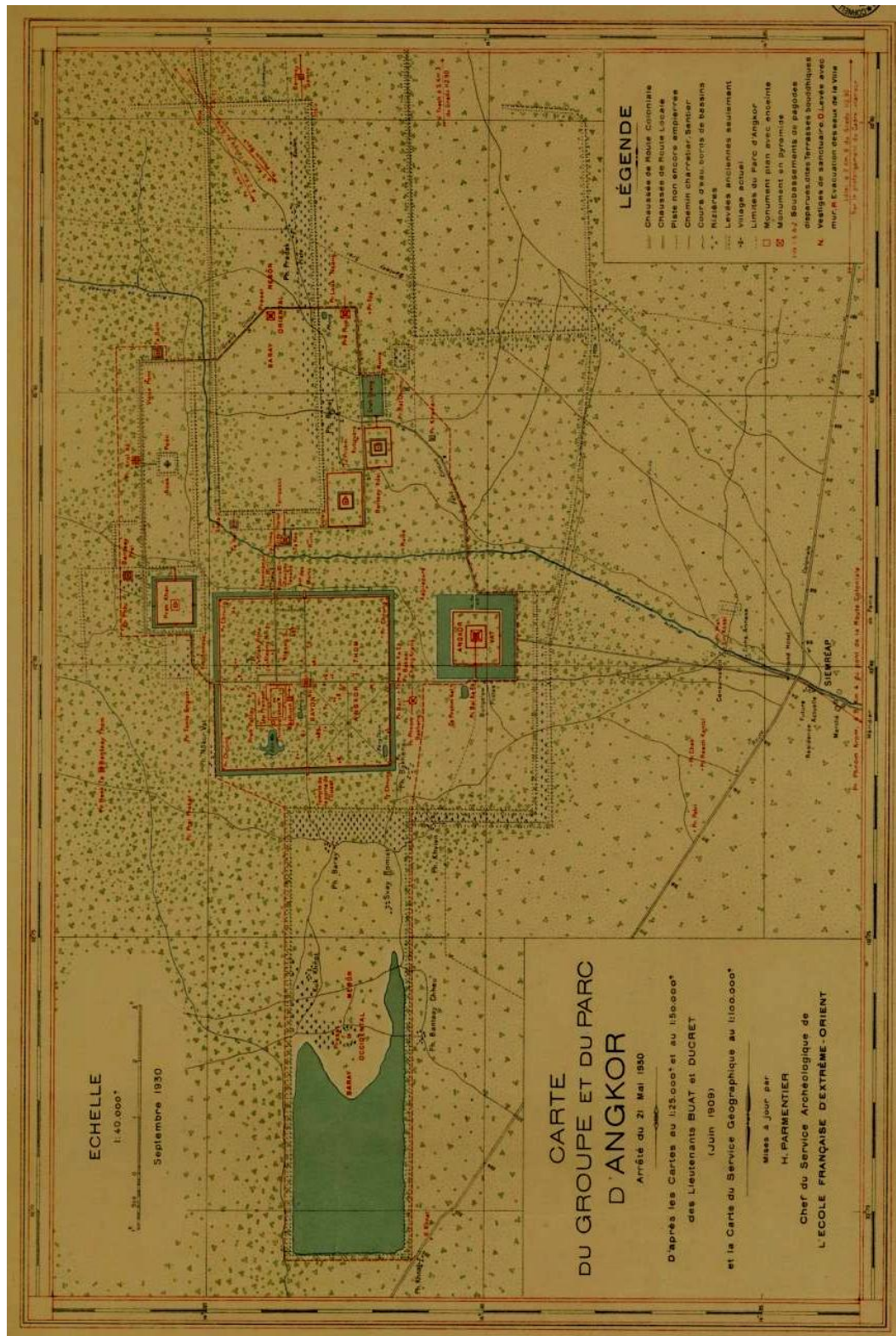


Figure 25: A 1930 updated map of the group of temples at Angkor by the French conservation organization; Source: Map library, Olin library, Cornell University.

CHAPTER 3: THE THREE CASE STUDY TEMPLES

Introduction

To provide readers who have little familiarity with religious architecture of Cambodia, this chapter provides both a general framework and case study examples. It begins by providing a brief description of Khmer architecture terminology. Then the discussion becomes more specific with an architectural description of each of the three temple complexes and a brief description of their contexts. It will also cover their use and other historical data relevant to this study. The descriptions have been presented in a chronological order and by the age of the temple.

A. Khmer Temple Architecture

Pre-Angkor temples generally consisted of a single square-brick sanctuary that housed the image of a god. Until the 10th century, these isolated sanctuaries generally were built in groups of three to five sanctuaries; each dedicated to a god of either the Hindu or Buddhist religion. These would be either arranged in a row or double rows. Some of the sanctuary structures were dedicated to the king's ancestors. In the Angkor period the number of sanctuaries multiplied and by the end of the 12th century, temples became a complex of structures where hundreds of deities were venerated.¹²³ At this time brick was replaced by sandstone as the chief building material. These elaborate complexes were built on a symmetrical plan along a main axis oriented east-west, with some also acquiring a secondary north-south axis. In general the temples

¹²³ Pg. 74, Petrochenko, *Focusing on the Angkor Temples*.

served a number of rituals or religious purposes, but they were also used for monastic teaching, following the religion practiced by the ruling king.

The temple compound was mainly rectangular or square in plan. The central part was where the *Prasat*, i.e. the sanctuary, was situated (Figure 26). These were built around a square cell housing either the statue of a divinity or a *linga* (a symbolic representation of the god Shiva). Small in size, the temple enclosure was meant to accommodate only the high priests performing the rites and probably the king. Traditionally it had only one opening to the east with false doors towards the other cardinal directions.



Figure 26: A detailed image of the fully developed sanctuary, built around a square cell with an opening to the east and false doors on all the other sides. The *vimana* or tower above it was decorated in the end with finials and a circular motif ending in a

shape of lotus flower. The top portion was mostly solid stone but hollow from inside and would only sometimes have decorations inside; Source: Michel Petrochenko, *Focusing on the Angkor Temples*.

The *prasat* could be related to the *mandala* a similar form of the central sanctuary in Indian temples. *Mandalas* are geometrical patterns representative of the cosmos according to Hindu mythology and represented similarly even in Buddhism. *Prasats* were a representative connection to South Indian architecture, which followed similar patterns of construction¹²⁴.

Beyond these sanctuaries, enclosures were built to surround the sacred space. This area is generally termed as the first enclosure (Figure 27 and 28). A series of other enclosures was built in sequence beyond them to enclose other annex buildings, all serving the main *prasat*. These enclosures had *gopuras*, or gateways, topped with towers that provided access to the central sanctuary and are generally located in each of the cardinal directions. They were either constructed of bricks or laterite blocks and are faced with sandstone in later temples. In some cases the enclosure walls got built as galleries, connecting the *gopuras*.¹²⁵

¹²⁴ Pg. 75, Petrochenko, *Focusing on the Angkor Temples*.

¹²⁵ Pg. 76, Petrochenko, *Focusing on the Angkor Temples*.

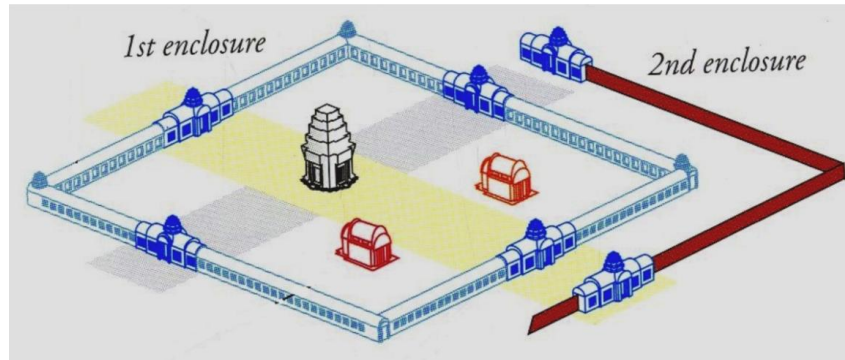


Figure 27: The temple structure evolved from the central sanctuary on an E-W axis with libraries mainly in the northeast and southeast sides. These were eventually enclosed with simultaneous enclosures with gateways in each direction. In some temples, remnants of monk residence has been seen in these enclosures; Source: Michel Petrochenko, *Focusing on the Angkor Temples*.

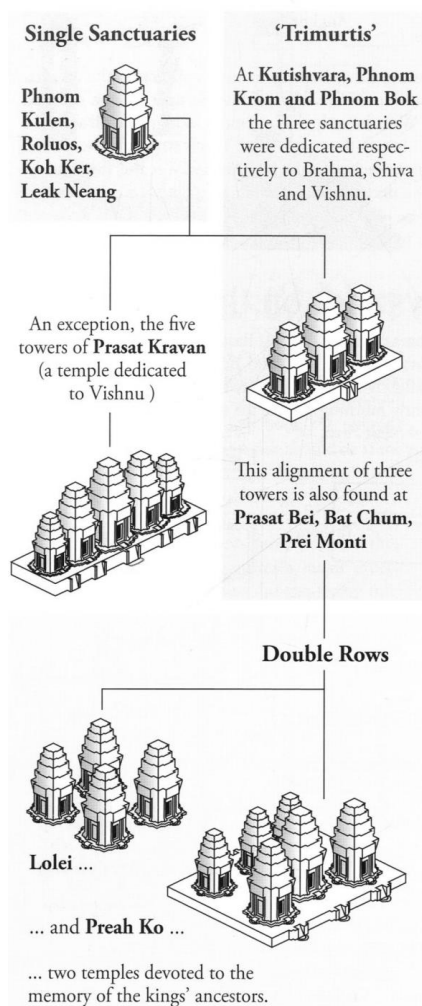


Figure 28: A schematic depiction of the evolution of temple sanctuaries up until the 10th c. with examples of its kind; Source: Michel Petrochenko, *Focusing on the Angkor Temples*

The mountain temple concept was first seen in the 7th c. at Ak Yom, then Bakong and finally the most developed until the 11th century at Phnom Bakheng. By the 12th c, all had certain characteristic parts. In the mountain temple concept five sanctuaries were located in the center (four at each corner of the platform with the middle one being the largest, Figure 29 and 30). This is considered to be representative of the five peaks of the mythical Mount Meru, the Himalayan abode of the Hindu god *Indra* and 33 other *Vedic* gods. This central or first platform was followed by tiered platforms making the first one the highest. The enclosures represented the mountain rings around Mount Meru and formed *mandalas* delimiting successive sacred spaces. Thus by entering through the *gopuras* and enclosures one reached the central sanctuary also considered the center of the universe or the kingdom. The moats constructed around the entire complex represented the cosmic ocean in the myth.¹²⁶

The other important structures within these enclosures were the libraries. Named after the inscriptions found in many of them, the libraries had thick walls. Most of them also had ventilation holes on their north and south sides just above the roof line. These structures were sometimes considered to be fire shrines because of the presence of holes, while other scholars considered them to be libraries where scriptures and valuable objects would have been stored.¹²⁷ These libraries seem to show no particular orientation, to which they would face as a general rule of thumb.

¹²⁶ Pg. 77, Petrochenko, *Focusing on the Angkor Temples*.

¹²⁷ Ibid.

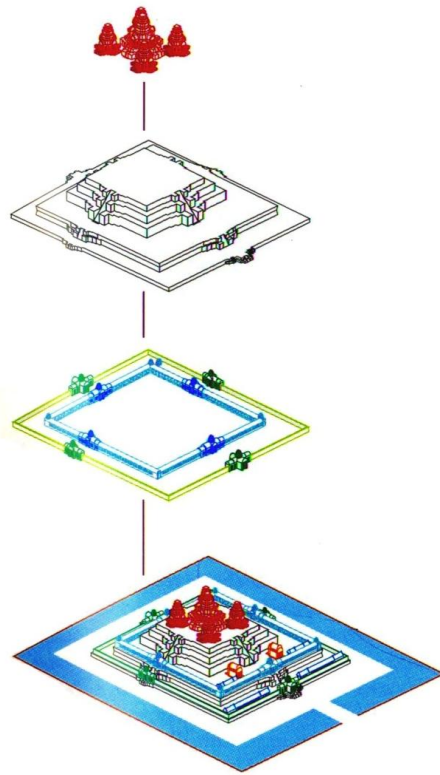


Figure 29: The mountain temple symbolism beginning first with the group of sanctuaries set on tiered pyramid representing the mythical Meru Mountain, these tiers had enclosures around it that represented the mountain rings delimiting sacred areas. Finally the complex was surrounded by moats that represented the cosmic ocean. The entire complex represented the mountain temple concept; Source: Michel Petrochenko, *Focusing on the Angkor Temples*.

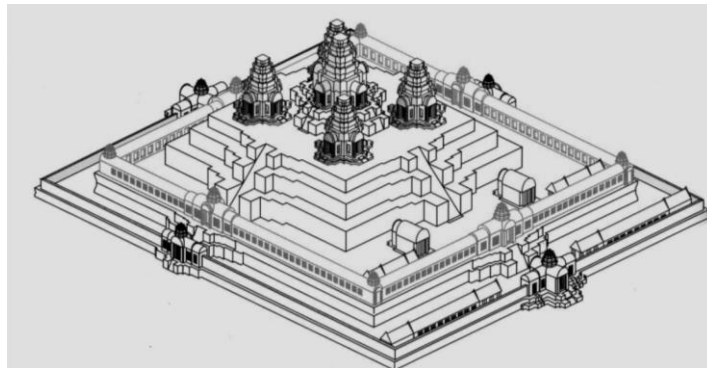


Figure 30: Ta Keo was the first example of the mountain temple concept and built entirely of sandstone; Source: Michel Petrochenko, *Focusing on the Angkor Temples*.

Most of the temples in the Angkor Archaeological Park are asymmetrical. Temples facing east had their southern half-section wider than the northern section. This was the case in most of Jayavarman VII's temples. Angkor Wat faces west although its northern section is wider. In general the right hand side of the god's statue was bigger, and this is where the first library would have been located.¹²⁸ The first fully evolved mountain temple was seen in the end of the 10th c, Ta Keo. It began a model wherein galleries were built as part of the enclosures around the sanctuary, and vestibules were attached to the main sanctuary and opened on all cardinal directions instead of just having one opening on the east.

The concentric galleries mainly opened up to the sides of the temples and were either a row of pillars or walls with false windows (Figure 31). These too have evolved from a basic gallery with one walled side and the other colonnaded, to bas-relief galleries with a supporting half-gallery. Angkor Wat has a prime example of this in its third enclosure, where the galleries are supported by a single wall and row of pillars.¹²⁹

¹²⁸ Pg. 79, Petrochenko, *Focusing on the Angkor Temples*.

¹²⁹ Pg. 83, Petrochenko, *Focusing on the Angkor Temples*.

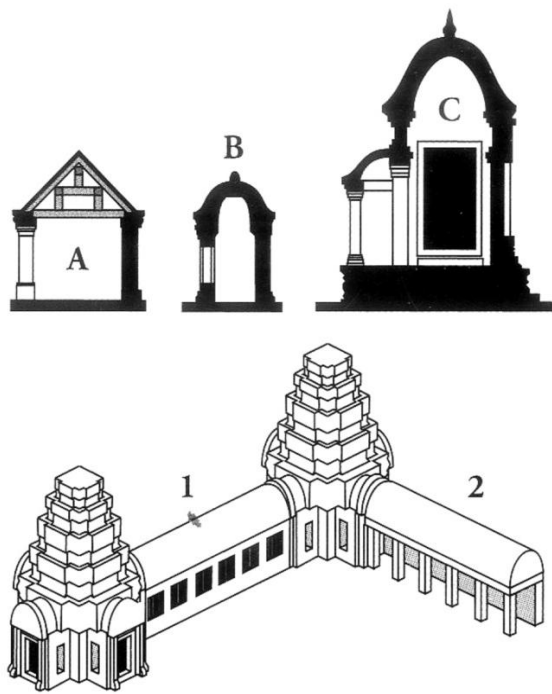


Figure 31: (A) In the first model of construction, the side opening towards the central alley was supported by a row of pillars and covered with a tiled roof, (B) These then got converted into vaulted roofs by the time Angkor Wat started being constructed, (C) The model was further developed in the first floor galleries when large bas-reliefs were added, thus the main gallery required addition of a supporting half-gallery; (1) At Angkor Wat the galleries connecting the sanctuaries were supported by two walls as seen on the second floor, (2) or by a single wall and row of pillars as seen on the third floor. The foremost use of these galleries has been not discerned, but some scholars assume them to be spaces for circum-ambulation or even monks to pray in; Source: Michel Petrochenko, *Focusing on the Angkor Temples*.

Subsequent additions to the sanctuaries included that of an *antarala* and a *mandapa* (Figure 32). Both characteristics of South Indian temples. An *antarala* is an antechamber or foyer space connecting the central sanctuary to a hall or *mandapa* in front of it. These additions were seen from the second half of the 10th c. and would sometimes even get extended to meet the *gopuras*.¹³⁰

¹³⁰ Pg. 81, Petrochenko, *Focusing on the Angkor Temples*.



Figure 32: The sanctuary after the *antarala* and *mandapa* along with side sanctuaries were added to it; Source: Michel Petrochenko, *Focusing on Angkor*.

Later mountain temples tended to become flat and not pyramidal, but they still retained the layout. They also started becoming crowded with sanctuaries added in the empty spaces in between the enclosures by latter kings.

Apart from bricks, laterite and sandstone the temples also have remains of wood in doors and other niches or holes marking the presence of other wood structures (Figure 33). Construction techniques like the mortice and tenon joints used in wood structures are also seen adapted in stone construction. Even door knobs or knockers on false doors and roofs of stone galleries were replicas of the wood models. Stone carving was done in situ, i.e. after the basic structure was erected the workers would

then draw and carve out shapes into the wall. This would allow excessive layers of stone to be removed to reveal the final reliefs.¹³¹

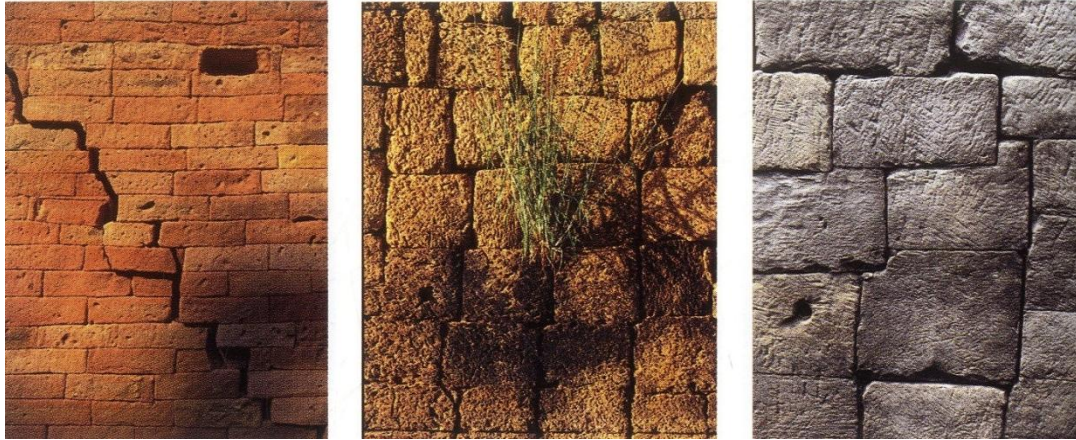


Figure 33: The major building material began from using bricks, to laterite and then finally sandstone; Source: Michel Petrochenko, *Focusing on the Angkor Temples*.

Temple architecture becomes more detailed when one studies the holes in the *linga* platform, or those in the walls and the styles being followed in different periods. The amount of decoration and the carving on the bas-reliefs in the galleries in the enclosure can differ considerably when comparing one example to another. Hence, this is only a basic outline to understand the temple complex. Before moving on, it is important to note that these temples have faced destructive forces, including Nature and Man. Many trees have infiltrated the masonry with their deep roots and have subsequently dislodged the structural stone. The tropical climate with excessive rain, sun and even bat excreta, have caused other damage. Man has caused the most intentional damage, abandoning entire structures and destroying the images of deities, often by looting sculpture and bas-relief-carving.¹³²

¹³¹ Pg. 88-89, 93, Petrochenko, *Focusing on the Angkor Temples*.

¹³² Pg. 86-96, Petrochenko, *Focusing on the Angkor Temples*.

To get a better understanding of the architecture it becomes important to look at the three temples individually and examine their architecture within their societal context.

B. Preah Khan Kompong Svay or Prasat Bakan

Historical data about the Angkor region indicates that this complex¹³³ was a royal residence during the kingdom of Suryavarman I (1002-1050 A.D.) with the later king Jayavarman VII having favored the region generously with new constructions. The former is said to have constructed the complex before recapturing the capital city of Yasodharapura.¹³⁴

Associated with the structural technology used in all of the temples, the site's close proximity to Phnom Dek (the 'iron hill', only 35 kilometers away) would have proved important for labor and materials (Figures 34, 35 and 36). The interpretation for the archaeological excavations in this region has suggested that Suryavarman I's reign was the point at which the Khmer become wealthy enough to form an independent kingdom.¹³⁵ The ancient road leading to Angkor via crossroads from the temple also might indicate trade between the two regions. This road would have led to the north to other capitals formed earlier and later by other Khmer kings.

¹³³ Description of the temple is referenced to Jacques, Claude, and Philippe Lafond. 2007. *The Khmer Empire: Cities and Sanctuaries, Fifth to the Thirteenth Centuries*. Bangkok: River Books (Pg. 174-197) and the author's visit in January 2014; the name is one that has been given to it recently due to its location and like many other temples, the original name has not yet been discerned.

¹³⁴ Pg. 379-381, Rooney, Dawn. 2011. *Angkor: Cambodia's Wondrous Khmer Temples*. Hong Kong: Odyssey Publications. It is not to be assumed here however that the city would be some sort of country-side residence, or even part of the same city as Angkor back then.

¹³⁵ Pg. 178-179, Jacques and Lafond, *The Khmer Empire*; Indo Pacific Prehistoric Association (IPPA)'14 conference at Siem Reap, presentation by Mitch Hendrickson.

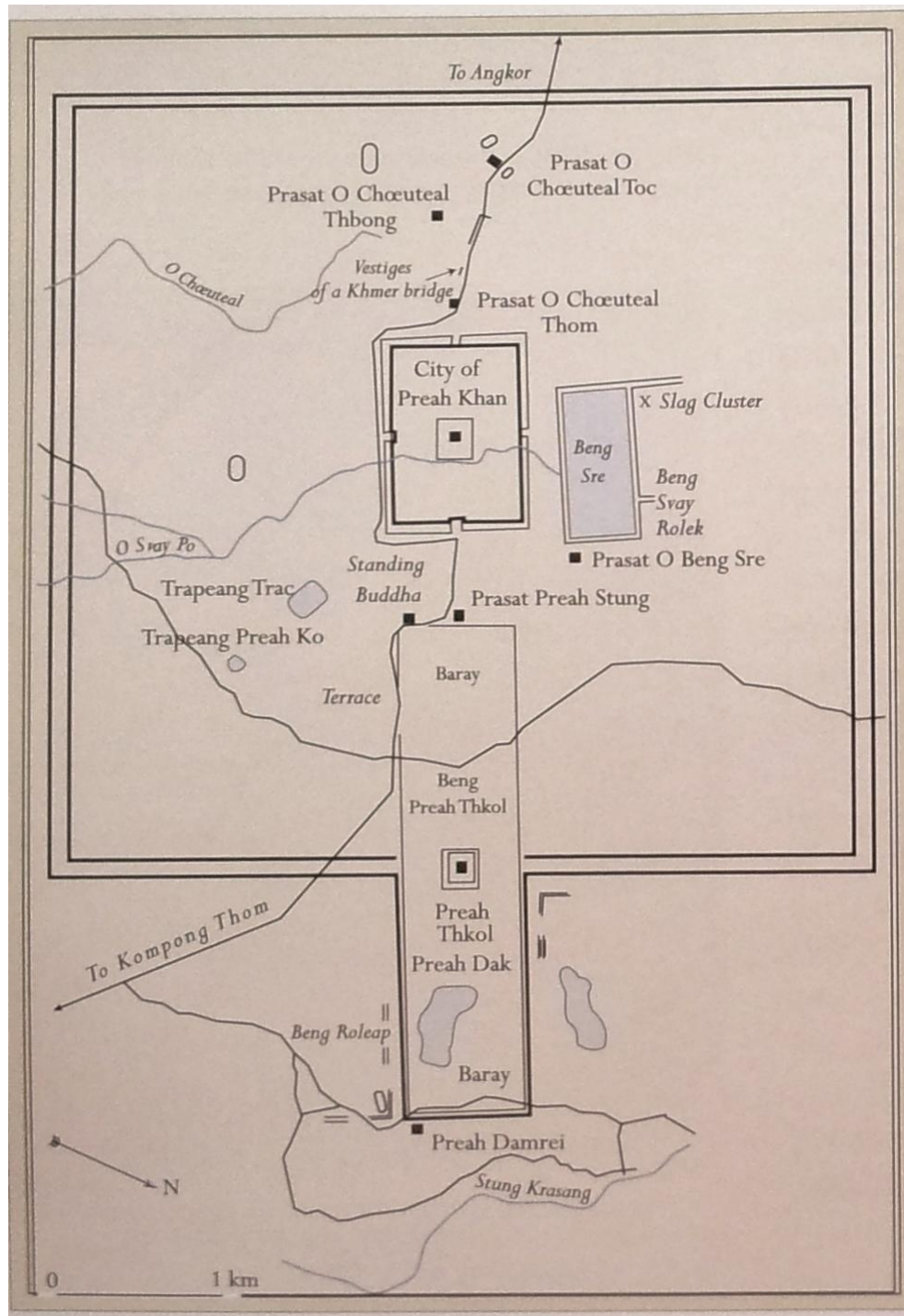


Figure 34: Plan of the overall Preah Khan Kompong Svay. The road that comes from Angkor does not follow the ancient route but turns to bypass many monuments on its way to leading directly to the west gate. This has been confirmed from aerial photos; Source: Jacques and Lafond, *The Khmer Empire*.

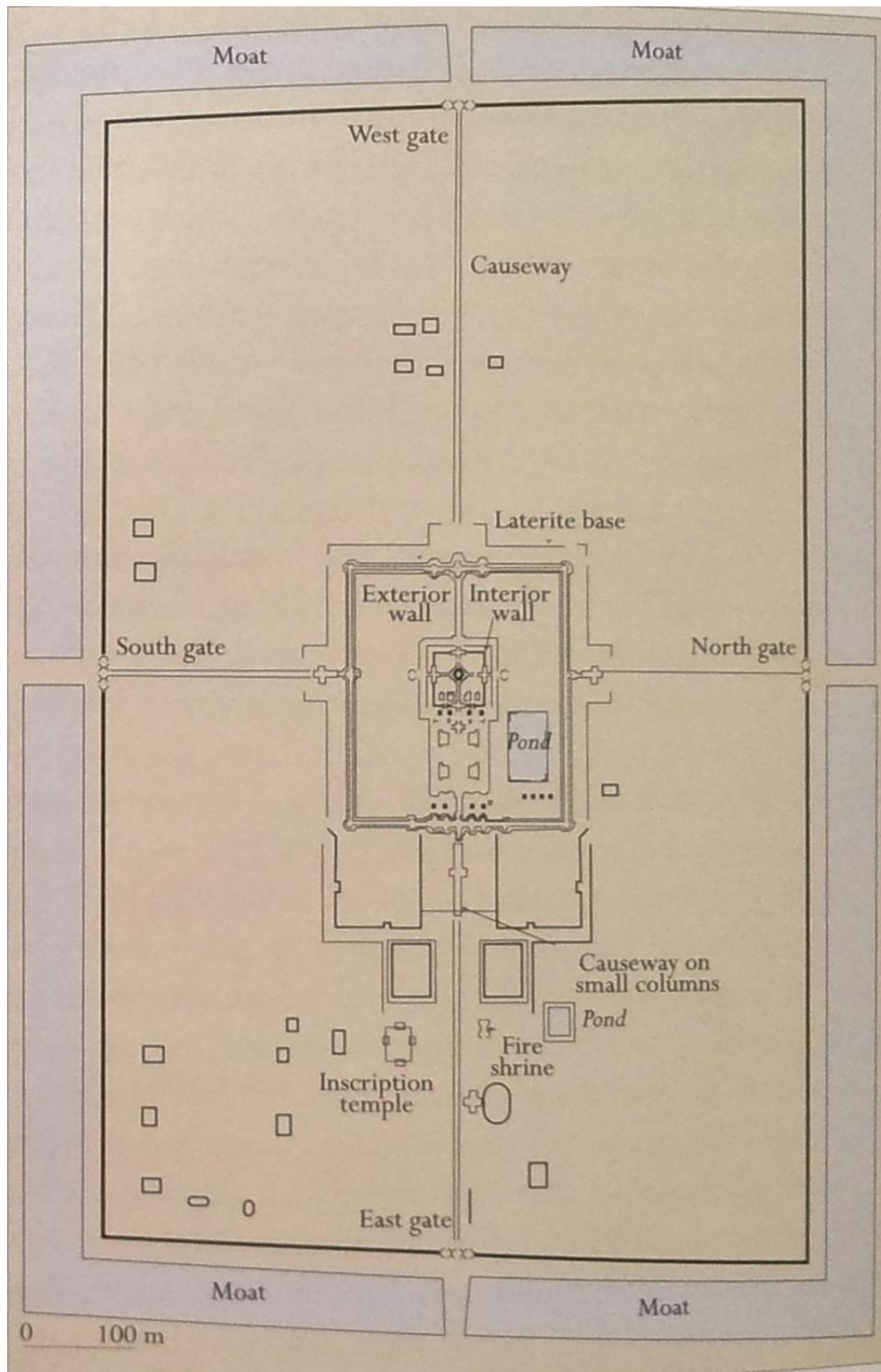


Figure 35: Plan of the Preah Khan Kompong Svay temple complex. It is slightly trapezoidal and the north is at a 30-45 degree angle at the bottom right corner of the image; Source: Jacques and Lafond, *The Khmer Empire*.

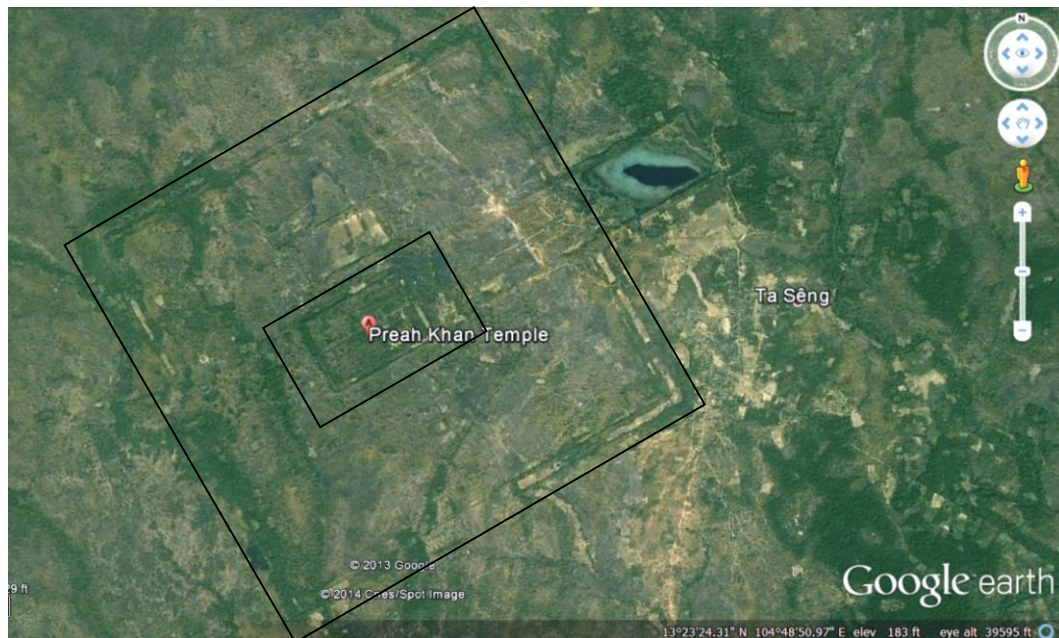


Figure 36: The actual orientation of the temple complex; Source: Google Maps.

The town and temple would have developed to support the forges and workshops to the south of them after the second half of the 10th c, i.e. inhabitants in the region could be mostly due to these activities. The laterite structures predating the main sanctuary around the temple would have been begun to be built by Suryavarman I in the beginning of the 11th c. The main shrine, representing the Ta Keo style, suggests that it could have been commissioned in the mid- to late 12th c.¹³⁶

The smelting and extraction of the ores in foundries in this region was carried out by an ethnic community, the *Kuoy* and not the Khmers (Figure 37). Their techniques were similar to the ones followed in India until recent times. Although it is uncertain exactly when ironwork technology was adopted, once established it was in

¹³⁶ Pg.181, Jacques and Lafond, *The Khmer Empire*.

high demand due to the need of the Angkor builders for objects like cramp-irons, braces and ties in construction, and even as weapons for the armies.¹³⁷

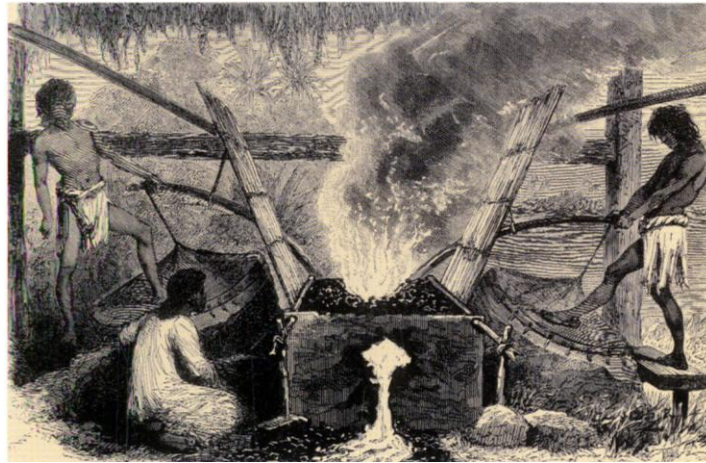


Figure 37: An engraving of a Kuoy iron foundry by Edgar Boulanger in *Un Hiver en Cambodge*. The molten metal can be seen flowing out at the west end of the foundry; Source: Jacques and Lafond, *The Khmer Empire*.

The site of the complex extends over an area of 30 sq. kilometers and would have been connected to Phnom Bakheng by road, which is still visible in aerial photos today. The main area of the site measures 5X5 kilometers bordered by a triple earth-bank¹³⁸. The temple complex itself is oriented to the north-east¹³⁹ with four concentric enclosures and was provided with water by a large *Baray* (reservoir) crossing its eastern side. The *baray* measuring 2800 X 750 meters was bordered on its east and west by other monuments, built later.¹⁴⁰

¹³⁷ Pg. 177-179, Jacques and Lafond, *The Khmer Empire*.

¹³⁸ Discovered and as seen in 1937 aerial photographs, which would not have been original to the main sanctuary and built in the 14th and 15th centuries as a defense measure

¹³⁹ Unlike other temples' regular and rigid east-west orientation; possibly towards Phnom Dek

¹⁴⁰ The complex is described as one enters from the east, and wherever necessary as moving in a counter-clockwise direction.

The outer enclosure measures 50 (E-W) X 48 (N-S) meters and is surrounded by a moat. An embankment in the east and narrowing of the moat suggests the addition of galleries later in the enclosure.¹⁴¹ It is approached by a causeway, the sides of which have bas-reliefs on the east and west with an alternating *garuda* (mythical bird, mount of Vishnu) and *naga* (snake) image. (Figure 38) The east *gopura* (gateway) in this enclosure can be dated to the 10th c. by its style of construction and predates that of Angkor Wat. It has three passageways; the central is in a cruciform shape and is flanked by a pair of porches. These join them to the side passageways and each would have had an individual porch abutting them. The walls of this enclosure are made from laterite blocks. Dating this enclosure has not been yet carried out, but all the other gateways certainly are from a later period as they have been built in the Angkor Wat style.¹⁴² Two libraries stand within this outermost enclosure and they are assumed to have been constructed around the same time as the central sanctuary.

¹⁴¹ Pg.181, Jacques and Lafond, *The Khmer Empire*.

¹⁴² Pg. 183-184, Jacques and Lafond, *The Khmer Empire*.



Figure 38: Reliefs on causeway sides at east entrance of the fourth enclosure; Source: Author.

Between this outer city enclosure and the inner temple enclosure lie two other structures, not axial and completely different in style. The small-unfinished laterite shrine (Figure 39) in the north-east has no carving of any sort, yet can be dated. This is possible due to the inscription engraved in the shrine's doorway jamb. This section is the only part of the whole structure to have been finished in sandstone. Though incomplete, the inscription celebrates Shiva, praises Buddha and the honors King Suryavarman I.¹⁴³ It mentions that the structure was built in 1010 and of Suryavarman I who at the time was planning to siege the Angkor reign. The Kuoy's Buddhist religion is also acknowledged in the incomplete engraving. Another temple, Prasat Beng Sre, closer to the north-west of the *Baray*, is also constructed in laterite and would predate what is now the central sanctuary.

¹⁴³ Pg. 182, Jacques and Lafond, *The Khmer Empire*.



Figure 39: The ‘inscription temple’ from the southeast showing its laterite structure;
Source: Author

The shrine opposite to this is a Fire Shrine¹⁴⁴, which indicates the site’s link to Jayavarman VII, due to similarity in styles of other shrines from the same period (Figure 40). With a single entrance to the south, its pediment is adorned with a *Boddhisatva Lokeshvara* engraving. The main purpose of these would have been either for travelers to rest (*dharmshala*) or to house the sacred fire for the temple.

¹⁴⁴Pg. 192, Jacques and Lafond, *The Khmer Empire*; more on Fire shrines on Pg. 263, Jacques and Lafond, *The Khmer Empire*.



Figure 40: The ‘fire shrine’ structure is completely tilted as well as has a broken sanctuary roof on its northwest side; Source: Author.

The next laterite enclosure surrounding the central sanctuary has central entrance pavilions¹⁴⁵, with the eastern side consisting of five passageways each to reach the sanctuary. The other gateways in this enclosure are smaller single entrance pavilions. Surrounded by another small 50 meter wide moat, its banks are made of laterite blocks. The causeway over this was bordered by *naga* railings¹⁴⁶ and lion sculptures (Figures 41 and 43).

¹⁴⁵ In the case of the temples in study: these pavilions of the galleries or enclosures refer to structure in the end that are similar to the entrance passageways and can also be used for entering the structure.

¹⁴⁶ Railings with a snake body opening up at ends with a carved five- or seven hooded head of the snake.



Figure 41: Causeway leading to the third enclosures' east entrance; Source: Author.

The innermost enclosure contained the central sanctuary and measures around 235 (E-W) X 205(N-S) meters. Between the central sanctuary and the wall with pavilions lies water tanks on each side, dressed with stone blocks. The cruciform structure before the main *prasat* is built entirely in sandstone and opens into porches in all cardinal directions.



Figure 42: The pediment of another structure within the third enclosure gives a better view of the Boddhisatva Lokeshvara; Source: Author.

Lintels of this structure, the central sanctuary and the enclosure's gateways' all have carvings of five meditating Buddha's (Figure 42). Apart from this they were all also once adorned with bas-reliefs of *apsaras* (celestial nymphs). The inner cruciform sanctuary's entrance towers are decorated with faces of *Kala* (mythical creature with a fierce monster face with huge fangs, and gaping mouth) in the lintels. It would also have had windowed galleries surrounding the central shrine, but none of these are either accessible or standing.

The most notable structures in this vast complex include the temple Preah Thkol (in the center of the *Baray*), Prasat Preh Damrei, Prasat Preh Stung, Prasat Choeuteal and standing Buddha statues, which are vestiges of Jayavarman VII and later period construction. Other small temples and shrines, some with raised platforms indicate the prosperity of this location-the decorative details on their lintels indicate their construction to be well into the second half of the 13th c.



Figure 43: Eastern entrance of the third enclosure from within it highlights the central and side passageways, it also shows the damaged structure run down with overgrown trees that provide its own charm; Source: Author.



Figure 44: Entrance of the second enclosure lies in ruins; Source: Author.

The city and temple of Preah Khan Kompong Svay could have been on the way to Champa¹⁴⁷ as well as to Angkor. Yet who commissioned them remains unknown. Apart from the inscription found at the site indicating Suryavarman I's presence, other 12th c. inscriptions give evidence of Jayavarman VII being born and brought up in the eastern section of the Khmer empire. His practice of a particular sect of Buddhism (*Shrighana*, that of five Buddha's) is seen in decorations at the complex, thus indicating his presence in the region.

C. Angkor Wat

Suryavarman II is the most eminent of all kings in the 12th century at Yasodharapura. He chose to exhibit devotion to Vishnu unlike any other Cambodian king who either aligned themselves to Buddhism, or the worship of Shiva (whom they considered their ancestral god and a part of nature). His devotion led to the commissioning of the largest complex of the period at Angkor. This complex included a temple, tomb, and an observatory and is now known as the Angkor Wat.¹⁴⁸ (Figures 45 and 46)

The temple is a significant mystery. It includes an opening to the west, the only temple in Yasodharapura to do so, and the bas-reliefs that are followed in a counterclockwise direction starting from the northwest quarter, a direction opposite to the holy circumambulation circuit or *pradakshina*. The orientation could be mainly to

¹⁴⁷Champa refers to the Cham kingdom located in what is today central and southern Vietnam from approximately the 7th century through to 1832.

¹⁴⁸Pg.38, 50, David Chandler, *ibid*. This is an argument that not many have been able to solve but scholars have accepted that along with Angkor Wat other Khmer temples could housed the ashes of the king, while being used for educational purposes; Mannikka, Eleanor. 1996. *Angkor Wat: Time, Space, and Kingship*. Honolulu: University of Hawaii Press.

honor the god Vishnu, who was vigorously venerated in the 12th century, a repercussion of his revival in the Indian subcontinent.

Another reason cited for its opening to the west is that according to ancient architectural treatises the opening must be towards the city, which in this case was to the complex's north-west. An opening to the west would be accessible from the existing road leading to the Phnom Bakheng and Royal Palace.¹⁴⁹ The spatial relations of the monument to notions of cosmic time, its accuracy and symmetry, along with its astronomic correlations, all suggest the high correlation to the Indian texts.¹⁵⁰

The temple construction began at the start of his reign and would not have been completed until his death in 1150. After this, an absence of significant inscriptions mars any significant knowledge of the continuation of the temple.

¹⁴⁹ Pg. 144, Petrotchenko, *Focusing on the Angkor Temples*. This information allows one to believe that the temple would be used just for that, a sacred place to worship and carry out monastic activities in close proximity to the actual city. Although no archaeological evidence has been found for sure.

¹⁵⁰ Mannikka, *Angkor Wat: Time, Space, and Kingship*.

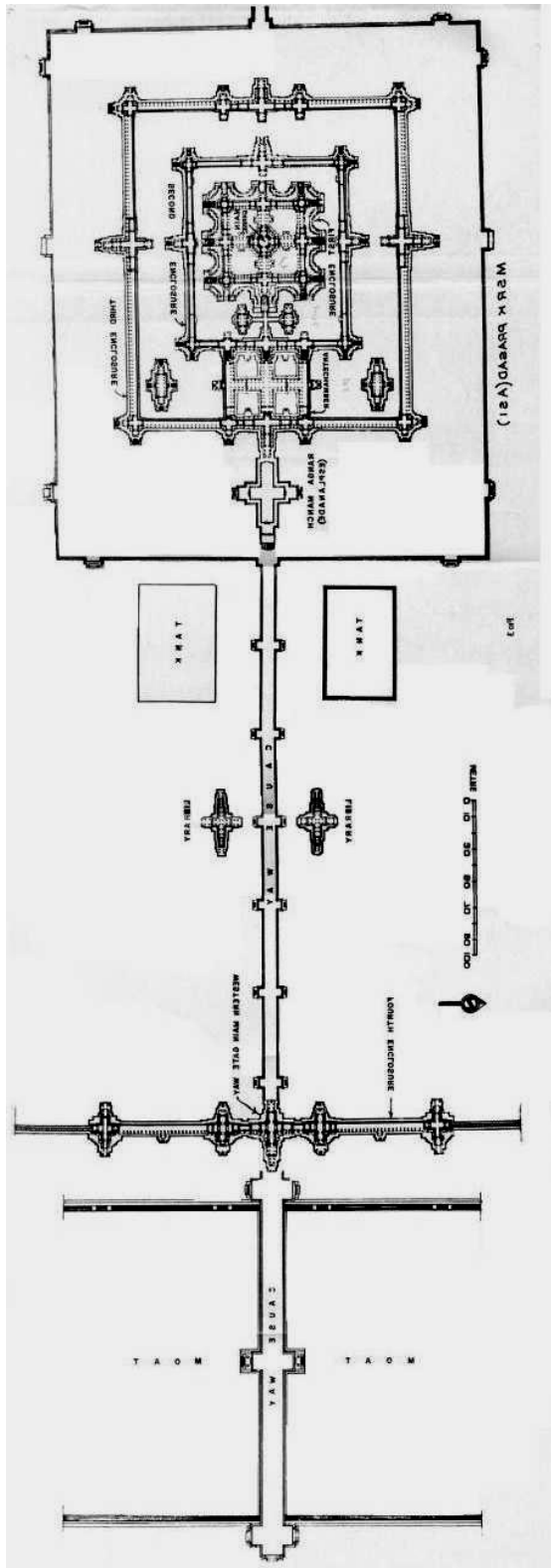


Figure 45: Angkor Wat plan by the A.S.I in their project report; Source: B.V Narsaimah, *Angkor Wat: India's Contribution in Conservation*.



Figure 46: An aerial image of the first three enclosures of the Angkor Wat; Source: <http://www.besttourism.com/items/di/262?title=Angkor-Wat-in-Cambodia&b=90>, with descriptions by the author.

The towers rise 60 meters (200 feet) above the ground, surpassing any of the temples built up until then (Figure 47). It covers an area of 2 sq. kilometers including its moat. The entire complex occupies around 500 acres of land and is one of the largest temples in the Angkor region. All the galleries have corbelled vault roofs and the entrance passageways are crowned with *gopura's* (towers). This roofing system was constructed with an interior drainage system carved into the sandstones, used as tiles for the roof.¹⁵¹ The hip line or crowning is a row of finials and ends mostly with dancing figurines standing on lotus platforms. Stone roof tiles are sometimes visible from underneath while walking through the galleries with only a few places having a flat roof underneath the vault with a medallion pattern.

¹⁵¹ Pg. 142-151, Petrotchenko, *Focusing on the Angkor Temples*.

The foundation of the complex is on a base of laterite and sandstone blocks. The center is filled with sand. Practically using no mortar, the earth dug from the moats would have been used to keep filling and increasing the levels up to the inner sanctuary. The sandstones are placed on laterite blocks throughout the superstructure.¹⁵²



Figure 47: The temple as seen from the northwest within its fourth enclosure, the central spire as seen is the tallest and is surrounded by 4 others on each of the direction at the first enclosure; Source: Author.

The complex has four enclosures. Entering from the west on the causeway, a 1.3 X 1.5 kilometers¹⁵³ moat surrounds the temple. This moat is 170 to 200 meters

¹⁵² Narasimhaiah, B. 1994. *Angkor Vat, India's Contribution in Conservation, 1986-1993*. New Delhi: Archaeological Survey of India.

¹⁵³ All measurements taken from Petrochenko, *Focusing on the Angkor Temples*, unless otherwise specified.

wide.¹⁵⁴ A small cruciform terrace leads to this causeway, which is 11.6 meters wide and is built on laterite stone with the floor paved with sandstone blocks. The terrace is flanked by lion statues on all three staircases' landing (staircases face north, south and the west) and has *naga* balustrades¹⁵⁵ (Figure 48), which extend onto the causeway. The moats are embanked by laterite stone blocks and dressed with sandstone steps. Once on the terrace and the causeway, the level gradually keeps increasing until reaching the inner sanctuary, truly representing the mountain-temple concept. It has a platform midway with the *naga* balustrades and lions flanking the landings.

Crossing the causeway, the western gateway of the fourth enclosure has five entrance passageways with *gopura*'s and is flanked by long galleries leading to end pavilions on both sides¹⁵⁶. The entrance *gopura* was constructed wide enough to keep the central towers hidden from the moat and replicates the silhouette of the central towers. The fourth enclosure surrounds the inner temple. The western gateways' passageways have cruciform plans with the longer sides oriented east-west and open onto attached lower and higher porches. The pavilions on the north and south of this side of the gallery (in the fourth enclosure) are the only ones without steps, which is why it is supposed to have been the entrance for elephants and other carriageways into the inner sanctuary. Yet these too have intricate carvings on the friezes of foliage motifs, mythical birds like the *garuda* and war scenes of *devatas*.

¹⁵⁴ The ASI records it as 200 meters wide, while other guide books record it as 170 meters, this difference could be attributed to whether the embankment was measured or not.

¹⁵⁵ Railings with a snake body opening up at ends with a carved five- or seven hooded head of the snake.

¹⁵⁶ The eastern gateway also follows a similar pattern; the other two directions have only one entrance gate or passage.



Figure 48: The Naga head railing (at the back) and the lion statues (in the foreground) flanking the entrance causeway stairs; Source: Author.

All the gates feature *devatas* (male gods), decorated pediments, false windows and doors, and medallion patterns on window frames. Constructed of sandstone, the surface of the double walls¹⁵⁷ of these galleries facing the inner side are lined with false colonnette windows¹⁵⁸, where the stone grill or balusters appear wood-like due to the turning details on them. The walls themselves on the outer side (that are facing the moat) have regularly placed reliefs of dancing *apsaras* or *devatas* with foliage patterns

¹⁵⁷ Double walls were constructed so as to support the load of the stone roof.

¹⁵⁸ Windows with circular balustrades or colonnette, which are filled in especially in the passageways and corners where the galleries begin.

around and under them. They are carved at up to a height of around 5 feet from the floor. This is also repeated on the walls between the false windows facing the temple (Figures 49 and 50). The colonnette windows in the western gateway's entrance passages overlook the moat, while the walls in the galleries open into a colonnade (Figures 51 and 52).¹⁵⁹



Figure 49: A medallion pattern seen on the window jamb; Source: Author.

¹⁵⁹ The colonnades in the Wat have square columns throughout.



Figure 50: Apsaras in the side wall of the temples galleries; Source: Author.

A second causeway, 360- 420 meter ¹⁶⁰ long and 8 meter wide, from this west entrance then leads to the temple. Lined with *naga* balustrades, it has two libraries flanking it midway on each side followed by two ponds again on either side (Figure 53). These ‘libraries’ are cruciform in plan and each cardinal direction has a porch with square columns gradually leading into the central cell. Colonnade windows line the walls of the entrance porches and the library. These libraries are said to have been used to store sacred texts, inscriptions, manuscripts, or the sacred fire when it was

¹⁶⁰ 360 m. from Narasimhaiah, *Angkor Vat: India's Contribution in Conservation*, while 420 m. from Petrotchenko, *Focusing on the Angkor Temples*.

converted to use for practicing Buddhism, before which it probably could have been used to honor other families of gods.



Figure 51: The inner side of the fourth enclosure with colonnette windows and apsaras low reliefs on the walls; Source: Author.



Figure 52: The colonnaded corridor of the fourth enclosure facing the outer side or the moat; Source: Author.



Figure 53: The northwest library with the causeway in the middle as seen from the southwest library; Source: Author.

From the causeway, while moving towards the third enclosure, another cruciform terrace guarded with squatting lion statues and *naga* balustrades is approached. This platform is said to have been used to host dances and other processions on special occasions and sits at a height of nearly 3 meters.

The third enclosure's galleries are the most intricately decorated and the bas-reliefs on its inner walls are 'read' in a counter-clockwise direction (Figures 54 and 55). Beginning from the western gate, this has three entrance passages, flanking galleries and pavilions at its end. The outer measurement¹⁶¹ from the pavilions of each side is 230 meters and the plinth is at a height of 4.5 meters. External dimensions of the third enclosure are 250 (E-W) X 187 (N-S) meters with the bas-reliefs running to

¹⁶¹ This means from the last step of each pavilion on each side.

nearly 700 meters. Similar to the fourth enclosures galleries' its walls¹⁶² facing the libraries open into a colonnade, while the other side of the double walls has blocked window niches. The inner walls are decorated with bas-reliefs. The spacing in between the square columns allows sunlight to fall both on the carvings of the walls and on the bottom of the columns. The bas-reliefs represent scenes from Hindu mythological texts like the *Kurukshetra* War, Vishnu waging war on demons, samudra-mathan by gods and demons (churning of the milk of the ocean), depictions of hell and heaven, expeditions of Suryavarman II, Krishna waging war on the *asura* (demon), gods waging war on a demon, and the battle between Ram and Raavan. The plinth of the enclosure is a series of semi-circular molds or *pattis* with foliage patterns. These run up to the ceiling height and are visible throughout the temple on all enclosures.



Figure 54: A bas-relief in the third enclosure in the southwest side; Source: Author.

¹⁶² For the purpose of this temple they will be referred to as inner walls from now.



Figure 55: Another section of the gallery showing the floor to ceiling bas-reliefs, note the ineffective temporary railing in front of the same not preventing visitors from touching the reliefs; Source: Author.

Apart from these, the lintels are also adorned with images of different *devatas* especially tales of the Ramayana and Mahabharata, scenes from the lives of Vishnu, Brahma and Shiva and various other animals revered by the Khmer's. Statues of deities including one eight-armed Vishnu and four female goddesses can also be seen in the entrance passageways of the central gate of the western side. Carved *apsaras* decorate sidewalls and doorways leading to these side passageways with medallions on the window frames and doorjambs with patterns of flowers, animals and birds.

The other two sides of the enclosure (North and South) have only one entrance passageway each flanked by galleries and pavilions at the end, all similar in detail.

The inner temple beginning from the third enclosure is said to have been built for access only to high priests, monks and the king himself. The inner platform or floor is the first of three before you reach the top inner sanctuary.

After circumambulating all the four sides, entering the second enclosure from the west, a quadrangle platform with galleries is approached. These enclose four inner courtyards and their walls open inwards, i.e. the walls of the galleries of this structure now open into the courtyard with colonnades. This would lead to the second enclosure that stands at a height of 7 meters. Plain square columns support the outer edge of the galleries' roof. The inner walls are adorned fairly infrequently with *devatas* and foliage patterns along the roof line. *Apsaras* adorn the walls that are in common with the third enclosures' west wall. The soffits of the colonnades have medallion patterns. The inner courtyards could have once served as water tanks. The galleries/halls were once lined with Buddha statues, some complete but most of them destroyed. This indicated the reuse of the structure after Buddhism became widespread in the region and well into the 15th and 16th centuries.

On the north and south of this are two small sanctuaries or libraries, similar to the ones encountered earlier (Figure 56). These are relatively simple structures in plan facing east-west and could be entered from all directions. The walls have symmetrically placed colonnette windows, while the roof in this case also has small openings of similar windows.

Moving into the second enclosure¹⁶³, which internally measures 120 (E-W) X 98 (N-S) meters, the galleries of this floor, follow a similar pattern as explained previously in the other enclosures. The only difference is that the walls of the gallery do not open into a colonnade but colonnette windows facing the inner sanctuary. Only the west gate has three entrance passageways, with the rest having one each. Each of the side gates have flanking galleries and end with pavilions. The walls of these galleries depict *devatas* and *apsaras*. They line the frieze and corner walls of the entranceways (on both sides), doorjambs and lintels. The pediments are also finely decorated and openings have colonnette pilasters. Statues of headless Buddha's are still revered in its hallways.



Figure 56: The library in the second enclosure in the southeast, on the right is the second enclosure and the left is the first enclosure; Source: Author.

¹⁶³ Again from the west, via the cruciform galleries.



Figure 57: Corbelled vault roof details of the first and second enclosure on the West as seen from the top of the first enclosure; Source: Author.



Figure 58: The west side elevation of the Angkor Wat showing the towers of the first enclosure in the middle and the four corner towers are those of the second enclosure; Source: National Geographic poster in possession of Author.



Figure 59: First enclosure's southeast corner pavilion, note the stairs blocked off to prevent climbing by tourists and locals; Source: Author.

The first enclosure, measuring 52 X 52 meters, surrounds the inner sanctuary and would have been accessible earlier through its corner pavilions and central entrance passageways via steep steps (Figure 59). It is at a height of 13 meters getting precedence above all the enclosures. The four corner entrance pavilions have pyramidal *gopuras*, while the central sanctuary's *vimana* (the tower above the main

sanctuary) rises up to 36 meters in height from the floor of the inner sanctuary and about 63 meters from ground level.¹⁶⁴

More detailed and intricate decoration is visible once inside the inner sanctuary on pediments, with a few remaining wood panels and reliefs of *devatas*, *apsaras* and other mythological scenes on the inner walls. The outer walls of the gallery have colonette windows that overlook the temple complex and far beyond.

The central and main sanctuary is accessible through the connecting colonnade galleries via the four directions from the first enclosure. It is built around a central cell, which is supposed to have been occupied by a statue of Vishnu himself with a pit underneath it reaching 25 meters below. This section, now walled up¹⁶⁵, has four *antaralas* (vestibules) surrounding it in each direction. These shelter Buddha statues within and are revered by the Khmer and taken care of by the monks within the temple complex.

The Buddhist monasteries lie on each side of the second causeway, one behind the north pond and one near the southwest corner of the third enclosure. At some point the central sanctuary would have been modified to house statues¹⁶⁶ of the Buddha, which could have also been possible due to the temple being incomplete until the time Suryavarman II died. The intricate detailing and fine workmanship seen in the temple indicates the importance given to this project and also suggests by campaign to future temples, the decline in their workmanship.

¹⁶⁴ These heights are taken from the A.S.I report.

¹⁶⁵ Dates of these being walled up has not been found, but is considered to be done in the late 20th c.

¹⁶⁶ Numerous were housed in the cruciform gallery between the 2nd and 1st enclosures; Petrochenko, *Focusing on the Angkor Temples*.

D. Ta Prohm

During his reign Jayavarman VII built temples in honor of his parents, the first of these known as the Ta Prohm. It was dedicated (or the temple's deity was awakened) in 1186 in honor of his mother and housed a statue of her and a statue of his Buddhist teacher. These statues were surrounded by more than 600 dependent gods and bodhisattvas, clearly indicting the existence of the two prevalent religions.¹⁶⁷

The temple complex was a monastery and its bureaucracy governed the placement and duties of the population. Detailed inscriptions of Jayavarman VII's rule provides information of infrastructure needed to provide food and clothing for the temples along with accounts differentiating the duties of the local people as from the Burmese or Cham, who could be prisoners' of war. The village sizes numbering 200 people, including dependents, was about the same number in the rice-growing villages in Cambodia until the 1960s.¹⁶⁸

Ta Prohm is a typical flat Khmer temple, unlike the temple-mountain prototypes like that followed at Angkor Wat (Figure 60). It still follows the pattern of five enclosures surrounding a central sanctuary.

¹⁶⁷ Pg. 62, Petrochenko, *Focusing on the Angkor Temples*.

¹⁶⁸ Ibid.

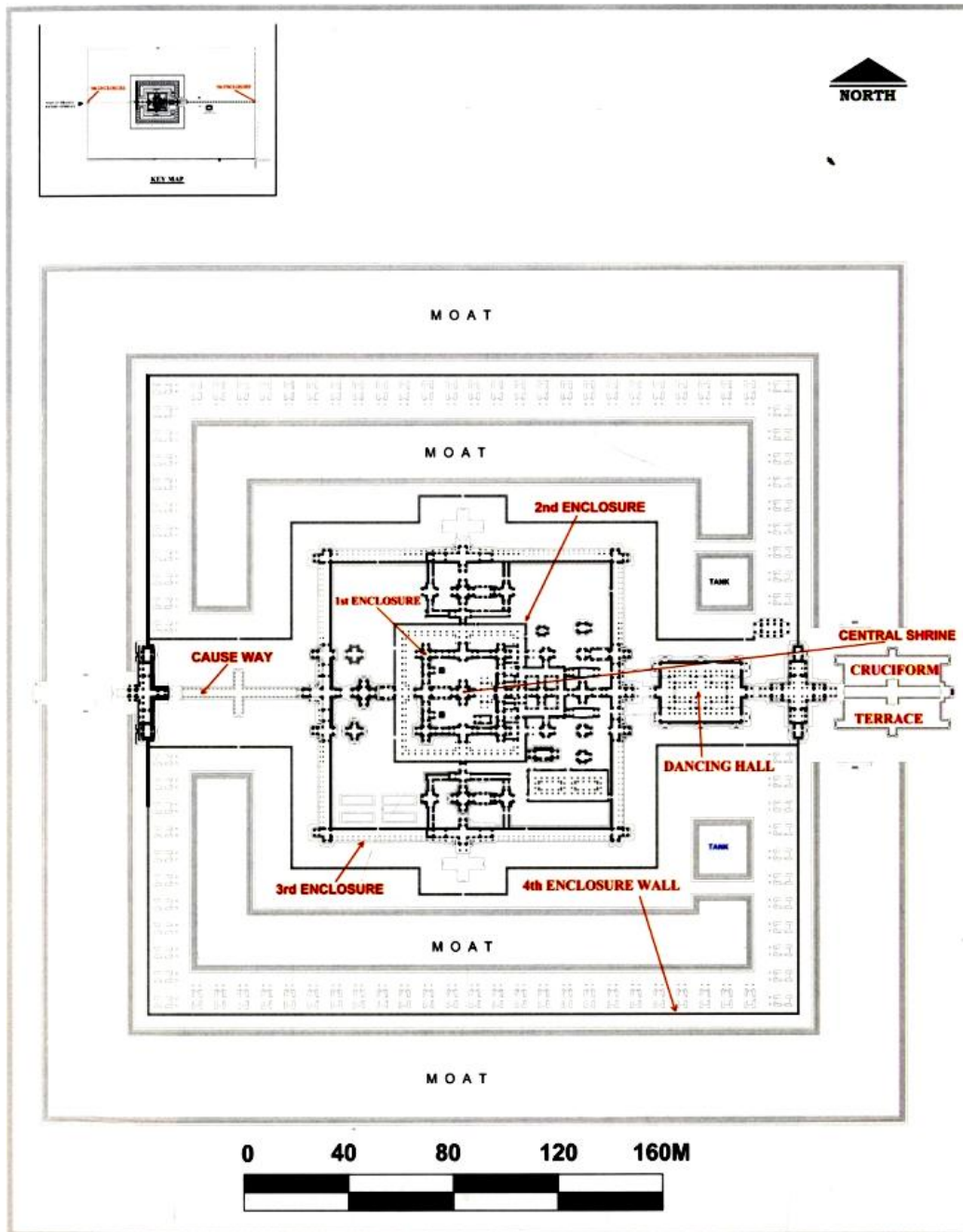


Figure 60: The Ta Prohm complex' layout; Source: Archaeological Survey of India, *Project Implementation Program, Conservation and Restoration plan of Ta Prohm Temple*.

Oriented to the open to the east, the fifth and outermost enclosure measures 1015 (E-W) X 670 (N-S) meters.¹⁶⁹ Each side of this enclosure has an entrance *gopura* that rises up to a height of 15 meters. The special features of these are that they are face towers and that the gateways are flanked by laterite walls. The face towers are *gopuras* on the entrances which have faces of either the king in a meditative state or of a Buddha, in this case the king's as it is considered to represent Jayavarman VII (Figures 61 and 62).¹⁷⁰ The entranceways (2.75 meters wide) are rather plain themselves, but have *apsaras* or goddesses on the cells on either side.



Figure 61: The east entrance of the fifth enclosure from inside; Source: Author.

¹⁶⁹ Measurements of Ta Prohm taken from Archaeological Survey of India. 2005. *Project Implementation Program, Conservation and Restoration plan of Ta Prohm Temple, Siem Reap Cambodia*. Government of India unless otherwise specified; in this case it has been taken from Petrochenko, *Focusing on the Angkor Temples*.

¹⁷⁰ Pg. 182-192, Petrochenko, *Focusing on the Angkor Temples*.

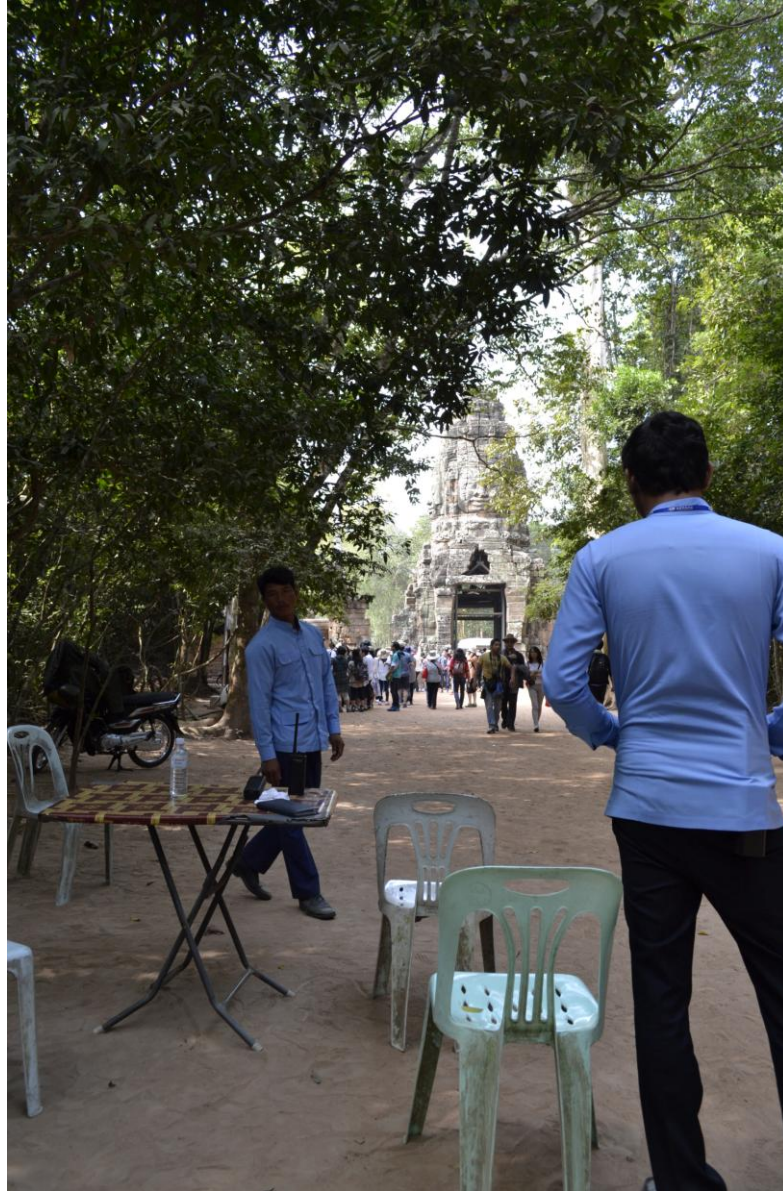


Figure 62: The west entrance of the fifth enclosure showing the face tower, with ticket checkers in front; Source: Author.

Entering from the east, on the right of the path is a *dharamshala* or house of fire. It is cruciform in plan with a sanctuary at its west end, flanked by an *antarala* and a *mandapa* (pillared pavilion). The roof is again a corbelled vault and the sanctuary has a low *gopura*. The outer walls have colonnette windows (which also

appear at the beginning of roof line) and *apsaras* in the side walls where they change plane.

Moving towards the temple, a large terrace raises the temple by a few meters. Constructed entirely out of sandstone blocks, the platform has *naga* railings and squatting lion statues on its north and south staircases (Figure 63).



Figure 63: The cruciform entrance platform looking at the eastern entrance of the fourth enclosure; Source: Author.

Beginning from the fourth enclosure (220 (E-W) X 250 (N-S) meters), the temple is surrounded by a double moat and is square in plan. An entrance passageway on both the east and west end of the fourth enclosure have a cruciform plan. The central longer section of the cell is oriented north-south and opens into subsequent

covered porches onto each side. It has colonnette windows on all its walls. The pediments of the entrance passageways have sandstone panels depicting Buddhist images and scenes of goddesses and mythical animals. *Apsaras* adorn the exterior walls mainly near openings up to lintel level. The west entrance of the 4th enclosure is constructed both in laterite and stone blocks unlike the complete sandstone gateway on the east. The eastern entrance also represents Buddha's life in bas-reliefs on its outer and inner walls. The central sections of both side passageways open into progressively lower and higher levels.

Going further into the temple, the hall of dancers (Figure 64) is encountered, getting its name from the decoration on its interior walls consisting exclusively of dancing *apsaras*. Measuring 21.6 (N-S) X 31.16 (E-W) meters, it has four inner courtyards and is basically a colonnade structure on the inside with outer walls entirely constructed of sandstone. They form galleries with side aisles when seen in section. The pediments on the cardinal entrances again have panels of Buddha scenes along with processions. Along with *apsaras* on its exterior walls and lintels, the hall has intricately decorated false doors and foliage patterns around them. Currently however, it lies in a ruinous state and sits on a plinth on the same level as the fourth enclosure.



Figure 64: The Hall of Dancers as seen from the northeast. It is currently being reconstructed through anastylosis process; Source: Author.



Figure 65: The eastern side of the third enclosure, note the connection behind the crane to the Hall of Dancers on the left and the ruinous state of the enclosure on the right overall; Source: Author.

Connected to the hall, lies the third enclosure (Figure 65), which has three entrance passageways in the center with the middle one larger than the other two. It is flanked by galleries and pavilions on both ends.¹⁷¹ The enclosure measures 124 (N-S) X 113 (E-W) meters externally and is constructed entirely in sandstone. Solid walls line the inner side (the sanctuary side) and the other side (facing the moat) opens onto a colonnade in the galleries, with pavilions at the corner of each side. The entranceways each have a *gopura*. Vaulted roofs with inner drainage system cover the roofs; a curved section of the roof goes onto the colonnade. The square pillars of the colonnade have *torana* details (leaf garland like pattern) in its echinus section. The walls facing the colonnade have low to high reliefs of foliage patterns and window arches (even Buddha images at certain places) respectively (Figure 66). *Apsaras* are seen on the side walls of the opening projections and court or religion preaching scenes with *naga* heads on the pediment. Each entrance passage has a *gopura* above it with colonnette windows on the inner walls and side walls of its entrance projected porches. This enclosure is supported from the moat by a low laterite wall.

Moving into the third enclosure and before the second enclosure are many other sanctuaries that would have been added to the complex as late as the end of the 15th c. These are mainly single cell sanctuaries and are also found in the narrow space on the east side between the first and second enclosures. Their pediments depict scenes from the king's court, worship of Buddha and medallions of animals. Some of

¹⁷¹ Similar to the Angkor Wat, these pavilions can also be used as entry points into the temple and have steps leading into it.

the structures have a cruciform plan with a central cell. These each have a *gopura* and confirm to the orientation of the complex itself.

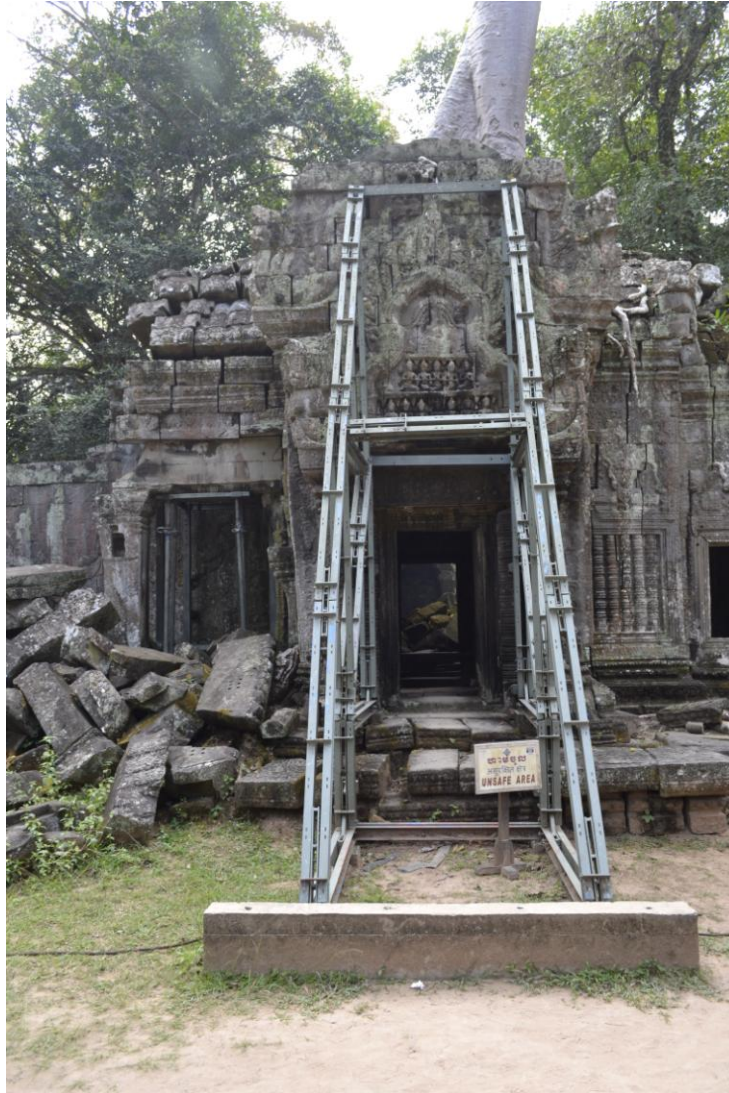


Figure 66: A corner pavilion in the third enclosure on the northwest side, note the pediment reliefs; Source: Author.

There are other temples that would have been constructed later, on the north and south between the 2nd and 3rd enclosures. The temples have walls of sandstone enclosing their sanctuaries. These have a cruciform-like plan, and an *antarala* and a

mandapa opening to the east. They are immediately adjacent to the gateways of the north and south gates of the third enclosures. These satellite temples within the complex are accessed by entries on the east and west. Small entrance passages again in cruciform plan on the east, west and south open into galleries. They have a corbelled vault roof constructed of sandstone. False doors and colonnette windows are seen on the entrance passages and corners. Low- mid relief carvings of medallion patterns are also seen with highly decorated pediments.

A cruciform gallery that could be part of the second enclosure lies beyond the sanctuaries encountered while entering into the third enclosure. It is reminiscent of the quadrangle platform encountered at Angkor Wat with the inner four courtyards.

The second enclosure has simple entrances on all its sides with three on the west and the rest with one. Its layout includes walls on the outer edge (facing the third enclosure) and colonnades on the inside facing the inner sanctuary or the first enclosure. It has similar roof structure and practically abuts the inner sanctuary. The enclosure is constructed mainly in laterite with bands of sandstone seen in many places along the vault line. The decoration includes similar foliage patterns, *apsaras*, and pediment panels as seen throughout the temple. (Figure 67)

The first enclosure constructed in sandstone is accessible from the east through a vaulted passageway. The enclosure has no colonnade aisles but the inner wall facing the sanctuary has colonnette windows and is square in plan measuring 24 meters internally. The sanctuary's *vimana* is the highest of all the *gopuras* of the corner and central entrances of the first enclosure. Apart from a few *devatas* on the exterior wall

of the 1st enclosure facing the main sanctuary on the east side of the north gallery, it bears almost no exterior decoration. In the interior, however, the galleries are richly decorated with foliated scrolls, *devatas* in niches and the grooves in the vaults are decorated with vertical motifs

The main sanctuary can be approached by a colonnade platform on the east into the *mandapa*, followed by the *antarala*. The interior wall of the main shrine has holes in it, which indicate their use either for precious stones or occasional decorations.

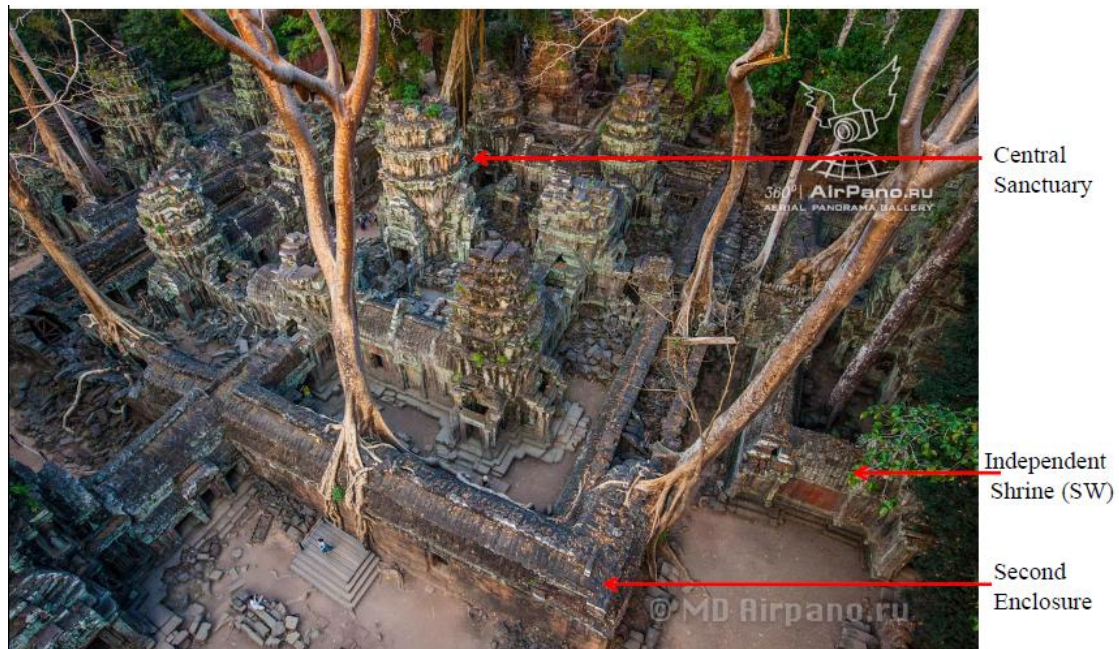


Figure 67: A panoramic view of the first enclosure (a bird's eye view from the SW) with the central sanctuary in the middle, note that they are connected to the second enclosure via passages, also the independent shrine constructed later in the mid-section of the photos in the left and right extremes of the photo; Source: Airpano, <http://www.airpano.com/360Degree-VirtualTour.php?3D=Ta-Prohm-Cambodia>

Going towards the west, three sanctuaries are connected to the central gate of the third enclosure via a chamber or *antarala*. The second, independent one of

laterite is on the north and features, for the first time, parrots. The third one on the south side is cruciform-square in plan and bears similar decoration. These independent sanctuaries would have been added in later times. The exit through the west gate is a sandstone cruciform terrace on a laterite block base. This connects the third and fourth enclosure at the same level. About 350 meters away from the eastern entrance *gopura* on the fifth enclosure; this causeway is 43.6 meters long and 4.6 meters wide. The plinth of the same has moldings on it and also has a *naga* balustrade with figures of *garudas* and lions.

The temple's use as a monastery has been recorded in inscriptions it contains and in other temples. Ta Prohm would have been mainly to provide Buddhist education promoting cultural activities including dance and music.¹⁷²

Conclusion:

The description of the temples has allowed the reader to get an overview of their construction and layout. The common attributes of these temples are given a considerable amount of attention by historians and preservationists due to their individual characteristics. Their association with other factors like iron production (Prasat Bakan), or unusual orientation and elaborate bas-reliefs (Angkor Wat), make them important for additional reasons. These attributes combined raises the question of how these temples in the Angkor Archaeological Park were selected to be worked on by the Indian Government.

¹⁷² Pg.182-195, Petrochenko, *Focusing on the Angkor Temples*.

The Archaeological Survey of India is a government run-organization and has been studied to understand their point of view on the above and more on the work they carried out at two of the temples. This was done so as to form a base and develop a cultural definition of the organization. Before this, the organization, its history and its work along with the field interviews are presented in the following chapter.

CHAPTER 4: THE INDIAN PERSPECTIVE

Introduction

To understand the work done by the Indian team, it is important to know more about the country's premier archaeological and antiquarian organization. This chapter focuses on the Archaeological Survey of India (A.S.I) in India and abroad with detailed mention of its presence in the conservation scene in Cambodia. It will cover the context of the comments and critiques made about the treatment of each of the case study temples. The chapter also includes views of the current team at Ta Prohm from interviews and in-field observations by the author.

A. Brief Outline and History of the Archaeological Survey of India

The Archaeological Survey of India (A.S.I) is a government-run agency in the Ministry of Culture in the Ministry of Tourism and Culture. Primarily concentrating on archaeological research and protection of the cultural heritage of the nation, the A.S.I is also responsible for maintenance of ancient sites and monuments under the jurisdiction of the national government. For better administration at the local level, the Survey is now divided into 24 regional offices (Circles)¹⁷³ with the central headquarters at New Delhi. Individually these circles consist of archaeologists, conservators, epigraphists, architects, and scientists. Apart from these Circles, the A.S.I also operates museums, and has Excavation Branches, a Prehistory Branch,

¹⁷³ By the 1900s the Survey had 5 circles headed by an archaeological surveyor each; these then began assisting the local or provincial governments in administering and maintaining the nationally important monuments; pg.85-86 Ashima Krishna, *"The Urban Heritage Management Paradigm: Challenges from Lucknow, an Emerging Indian City"* (Ph.D. diss., Cornell University, 2014).

Epigraphy Branches, a Science Branch, a Horticulture Branch, a Building Survey Project, Temple Survey Projects and an Underwater Archaeology Wing.



Figure 68: A special 150th anniversary ticket for the A.S.I managed structures;
Source: www.asi.nic.in.

The Survey officially began in 1861 under Alexander Cunningham, continuing work from a preceding outstanding but private organization, the *Asiatic Society* in Calcutta. British archaeologist Sir William Jones founded the *Asiatic Society* in January 15, 1784. It began with a selected number of British residents of Calcutta with a view to establish a society for the Asiatic studies.¹⁷⁴ The geographical scope was extremely large and it included the study of the works of Nature and of Man. As such survey projects were mounted searching for antiquarian remains, lithographs, ancient scriptures, and texts. These mainly included surveys of structures and remains

¹⁷⁴ Pg.2-24, Chakrabarty,R.(2008). *The Asiatic Society: 1784-2008, An Overview in Time Past and Time Present: Two Hundred and Twenty-five Years of the Asiatic Society* Kolkata: The Asiatic Society.

in the northern part of the South Asia and uncontested sections, i.e. mainly Buddhist remains.¹⁷⁵

From 1788 it began to publish a journal *The Asiatic Researches* and built the first museum in Bengal in 1814. For the first 44 years, only Europeans were elected members of the Society. Only in 1829, were Indians elected as members. Slowly attempts at getting government legislations to ‘intervene in case of monuments at risk’, was carried forward. Along with government interventions, increasing membership and change in organization structure of the Society, which included the interventions of Alexander Cunningham to formulate an Indian Archaeological Survey and place it under the British government, led the Society to gradually become the Survey after 1861.¹⁷⁶ In 1923, John Marshall¹⁷⁷ compiled the first conservation manual, a guideline for conserving monuments and excavation techniques. Today the A.S.I has under its wings of administration, maintenance and protection umbrella more than 3,675 monuments and sites of national importance. Of the 22 properties designated World Heritage in India, 19 are handled by the organization.

B. Conservation Legislation in India

Early attempts at formulating legislation were mainly directed towards providing a legal framework to prevent vandalism and export of antiquities, and protecting monuments by preventing further disintegration. Beginning with the Bengal Regulation of 1810 and Madras Regulation of 1817 to the Ancient Monuments

¹⁷⁵ Adapted and referred from http://asi.nic.in/asi_aboutus_history.asp#1861; Pg. 29-30, Krishna, *The Urban Heritage Paradigm*.

¹⁷⁶ Ibid.

¹⁷⁷ He was the Director General from 1902-1928.

and Preservation Act passed in 1904, currently the preservation legislation enforcing management and preservation of archaeological resources includes the Ancient Monuments Preservation Act (1904), the Ancient Monuments and Archaeological Sites and Remains Act (1958), the Treasure Trove Act (1878), and the Antiquities and Art Treasures Act (1972).

The A.S.I became a permanent agency in 1906 with various functions including excavation, conservation, epigraphy, museums, and publication. Today, archaeological and maintenance projects are handled by the local governments or where possible by the Survey. The local governments formerly constituted the remaining *nawabs*, land lords or the rich and even some British army generals. In some cases, members of the society formed trusts to administer their local history.¹⁷⁸ This has now come mainly under the jurisdiction of state or local governments. Following the Devolution Rules of 1921 archaeology was classified as matter of central jurisdiction. Hence all monuments protected under the Act of 1904 automatically came under the control of the central government. Subsequently the Government of India Act of 1935 specified that the ancient, historical monuments, archaeological sites and remains be added to the national list.¹⁷⁹ Yet this list is far from complete, and most of the historic fabric around the ‘designated’ sites are left to private individual local authorities or go completely unprotected. This is sometimes a

¹⁷⁸ As seen in research indicating the same; Krishna, *The Urban Heritage Management*.

¹⁷⁹ Government of India Act of 1935 passed to allow more representation of Indians in the government and provide for the establishment of a "Federation of India", to be made up of both British India and some or all of the princely states.

hassle while handling nationally designated monuments as the A.S.I have jurisdiction locally and are not able to respond timely to all the structures in need of attention.

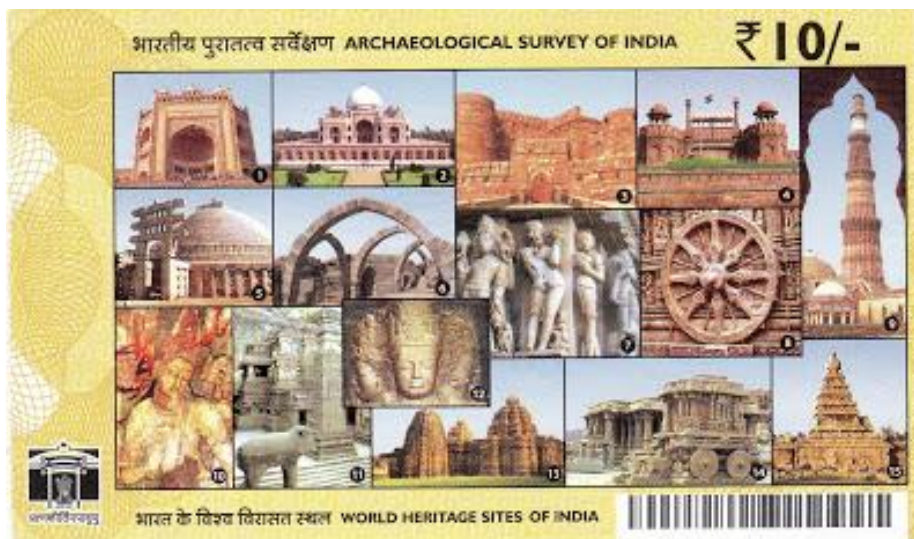


Figure 69: A regular A.S.I ticket highlighting some of their major and more popularly known sites; Source: Author.

After these acts were passed the conservation of the listed works became the responsibility of the A.S.I, to ensure a proper and uniform standard of repairs. Under the Indian Constitution, now the archaeology work is divided between the central government and the individual state's Archaeology department in the State Ministry of Culture. According to the A.S.I website, their employees are said to be 'acquiring cumulative knowledge and expertise of several generations in the field'.

Funding for projects on A.S.I's list is primarily through the resources allocated to it by the Ministry of Culture.¹⁸⁰ The A.S.I still follows the Conservation Manual by John Marshall along with the Venice Charter.¹⁸¹

Legislations followed by the A.S.I today include the UNESCO Conventions on the Protection of Cultural Property in the Event of Armed Conflict (1959), the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (1970) and the Protection of the World Cultural and National Heritage (1972) in preserving a number of monuments, some of which are now under the World Heritage List.¹⁸²

Conservation work now is mainly divided into structural and chemical works. The scientific research field is considered as important as structural works with a stress on diagnostic options. According to the Survey's mission statement, these "must be based on a preliminary investigation which includes the knowledge of physical nature of the object (constituent materials, architectural characteristics, production techniques, state of decay) and of the factors which induce or could induced its decay."¹⁸³

¹⁸⁰ Other funds for non-designated sites are through another government organization, the National Culture Fund, which allocates the Ministry's money on the basis of the age of the structure.

¹⁸¹ Pg. 88, S.B. Ota, *Archaeological Heritage Resource Management in India, Cultural Heritage Management*.

¹⁸² Pg. 88, S.B. Ota, *Archaeological Heritage Resource Management in India, Cultural Heritage Management*.

¹⁸³ www.asi.nic.in, last accessed on January 15, 2014.

C. The A.S.I in Cambodia

A.S.I has worked on archaeological projects in more than 11 countries beyond the sub-continental Asia. In mid-1960 the Survey carried out studies in Afghanistan, Indonesia, Egypt and Nepal. In the early 1980s, it proceeded to Cambodia, Bahrain, Maldives, Bhutan, Angola, Vietnam, and Myanmar¹⁸⁴.

The A.S.I first entered the conservation scene in Cambodia at Angkor Wat. A set of professionals first visited the temple in October 1980 to prepare a Status Report. This was carried out in preparation for the project agreement to be signed in 1986 between India and Cambodia. Spread over seven seasons from 1986 to 1993, the project was financed by the Ministry of External Affairs. It was the single largest project undertaken by the Government of India (GOI) under its Indian Technical and Economic Cooperation (ITEC) program in any country.

A detailed report of the project estimates the cost at over 3,00,00,000 rupees¹⁸⁵ with over 20,000 man-days spent by the A.S.I experts at the site.¹⁸⁶ Yet as the project reached its end with rising disturbances in 1994 and journalists and scholars from other countries began slowly trickling in, they started receiving ‘international’

¹⁸⁴ More about the latter 6 projects can be found on http://asi.nic.in/asi_abroad.asp, Last accessed on January 15, 2104.

¹⁸⁵ Totaled from amounts on Pg (xi) of Foreword, Narsaimah, *Angkor Wat*; Rs. 3,04,20,652 is US \$499354 if the 1994 exchange rate of Rs. 32.73 is applied.

¹⁸⁶ It has to be noted here that the French organization, École Française d'Extrême-Orient (EFEO) worked on Angkor Wat and other temples in the Park, from the early 1900s. At Angkor Wat, they mostly carried out work in clearing the temple from the overgrowth, carrying out anastylosis processes (a reconstruction technique whereby a structure or part of it is restored using the original architectural elements to the greatest degree possible) on the main causeway, and some parts of the galleries and inner enclosures (although not much documentation of this is available in public circulation apart from the little literature in their own libraries). They continued to try and cover up their work until 1970. From authors visit to the EFEO library in Siem reap and <http://www.efeo.fr/index.php?l=EN>, last visited January 15, 2014.

criticisms about the chemical work carried out and the nature of the structural conservation techniques. A huge hue and cry was made over the chemicals and hard brushes used to rub over the delicate stonework, the cement used to fill into large and small cracks and the use of steel hoists to reassemble stone entryways. In response, the Indian team insisted that it was simply removing vegetation and carefully rebuilding collapsed stone structures.¹⁸⁷

The main dispute expanded beyond the restoration of Angkor Wat and was part of a larger discussion among the foreign professionals, scholars and bureaucrats. The debate was about whether (and how) other nations¹⁸⁸ should cooperate in preserving the complex of more than 70 major temples spread across almost 155 square miles. The UNESCO was supposed to have been guiding the Cambodian government with a blueprint for conserving these stone monuments over a long term.¹⁸⁹

Unfortunately, because UNESCO has no money to provide personnel and because considerable bickering has arisen among outside experts over 'who should do the work and who should serve on an international advisory panel that is being formed to counsel the Cambodian Government on the restoration',¹⁹⁰ the effort has been delayed. According to the UNESCO, its immediate goal was to secure Angkor Wat the inscription of the site on its World Heritage List. Assumedly this would allow the

¹⁸⁷ Philip Shenon, 'Washing Buddha's Face.' *The New York Times*, June 21, 1992; <http://www.nytimes.com/1992/06/21/magazine/washing-buddha-s-face.html?pagewanted=all&src=pm>

¹⁸⁸ Other nations, i.e. except France.

¹⁸⁹ Shenon, 'Washing Buddha's Face', *ibid.* It was involved since the early 1990's.

¹⁹⁰ *Ibid.*

organization to assume a more ‘formal role in overseeing’¹⁹¹ and get more funds for the project.

UNESCO became so alarmed at the difficulties at Angkor that the properties were listed on the ‘World Heritage in Danger’ list in 1992. In an attempt to get all the countries who were becoming involved, UNESCO formed the International Coordinating Committee (ICC). Since October 1993¹⁹² the ICC has been coordinated and co-chaired by the Ambassadors of Japan and France in Phnom Penh, with a Secretariat provided by UNESCO. It meets twice each year to discuss priorities and to monitor the conservation work in the region as well to collect needed funds. The ICC is supported by Cambodia’s Minister of State and Minister for Culture. The Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA) was created then by Royal decree to administer the activities of the ICC.

Since the ICC’s formation in October in 1993, more than 20 countries and 70 projects¹⁹³ have been undertaken by teams around the world. Despite the criticisms the Indian team faced 10 years ago, the A.S.I team was again invited to restore Ta Prohm in December 2003¹⁹⁴. This time the A.S.I carried forward the work under inspection and guidance from the ICC. They outsourced most of the technical work to teams from the Indian Institute for Technology (IIT), Madras, and Water and Power Consultancy Services Limited (WAPCOS) and the Forest Research Institute (F.R.I,

¹⁹¹ According to UNESCO’s local representative in Cambodia at the time, Richard A. Engelhardt, an American archeologist in Shenon, ‘Washing Buddha’s Face’.

¹⁹² <http://www.unesco.org/new/en/phnompenh/culture/tangible-heritage/icc-angkor/>. January 15, 2014.

¹⁹³ From interview with Director of Communications, APSARA.

¹⁹⁴ In the Indian Express article, Mr. Sood mentions of how they were given the Ta Prohm so as to put them under the microscope, which is similar to the attitude the A.S.I applies back at home, that of avoiding stance or participate in a controversial project, like religious buildings.

Dehradun) for the project, which was estimated to run till 2014. Currently the work continues. The high quality and the constructive dialogue between the A.S.I and the members of the ICC is much appreciated.¹⁹⁵



Figure 70: The ex-president of India, Smt. Pratibha Devisingh Patil viewing the bas-reliefs at Angkor Wat in Siem Reap in Cambodia on September 17, 2010, depicting the Mahabharata Battle; Source: Connecting India and Cambodia, http://www.iac-cambodia.org/president_speeches.php

D. The Controversies' Context and the Barrage of Comments

The controversy about the treatment of the A.S.I at Angkor Wat is colored by the perspective of those who have commented on the work. The Indian ambassador to Cambodia from 2004-08, Mr. Alope Sen commented through a news article on what he believed had transpired (as late as in June 2013). The now ex-ambassador said,

“Conservation- a legitimate area to project a country’s ‘soft power’ - is an increasingly competitive field today. Even if funding is wholly the

¹⁹⁵ Excerpt taken from 18th plenary session discussion of the ICC, mentioned by Mr. Giorgio Croci, Pg 21 of ICC 18th Plenary session report.pdf, <http://unesdoc.unesco.org/images/0021/002164/216460E.pdf>.

concerned country's contribution, accountability for the project being undertaken is far greater now: supervision and standardization by an international overseer such as the UNESCO means intrusive scrutiny of work. In following the course of the ASI's Ta Prohm project and the work of conservation teams from other countries in Cambodia, I was fascinated by the politics of one-upmanship. A readiness to belittle the work of another seemed to be an essential rule for establishing one's own excellence. No wonder the ASI's 'past crime' at Angkor Wat kept making an appearance every now and then."¹⁹⁶

Despite the above comment he expressed doubt in certain skills of the A.S.I and its concern over other things like funds, infrastructure, and staff. He wished personally the Indian team would have the answer to this by concentrating more on scholarly work and conservation.

The criticism that followed the work at Angkor Wat was reported mainly by foreign newspapers. In general the criticism concerned the 'antiquated' and harmful techniques that were being used. Although some comments applauded the involvement of the A.S.I other comments about the techniques were not as favorable. The situation reinforced the view of a tug-of-war-like situation in the preservation scene in the country. Others who visited the site noted that they detected damage to the monument, as noted below:¹⁹⁷

¹⁹⁶ Alope Sen, 'Calling up the Past- Conservation as a Soft Power', *The Telegraph*, June 12 2013

¹⁹⁷ Excerpts are quoted from Shenon, 'Washing Buddha's Face', unless specified otherwise.

- Eleanor Mannikka, (Art Historian at the University of Michigan, visited the site in 1991): "This is housekeeping, not conservation... The ancient stone is being eroded."
- Patrick Matthiesen, (London art dealer, trained in stone conservation at Victoria and Albert Museum in London, visited Angkor twice since the work had begun): "horrified" by the chemical washing. He recalls one relief that, he says, had lost all definition because of the scrubbing. "Quite clearly it was the chemicals that had attacked the stone and removed the whole surface as it was rubbed," he says. "I tried to photograph it, but there was so little definition left it was futile." He also expressed fear about the long-term effect, as the fungicides and preservatives settle into the stone.
- Pich Keo, then director of Cambodia's national museum: "appreciates the fact that in the early 1980's... only India responded, offering assistance ... But he makes clear that he is appalled at what the Indians have done to Angkor Wat... I see this work and I think no good".
- Jacques Dumarçay (French architect affiliated with the Ecole Française d'Extrême Orient, (EFEO)): "I have many friends in India, and I want to keep them... But he can't find anything friendly to say about the Indians' work at Angkor Wat... I don't like it"
- Yoshiaki Ishizawa (Director of Asian Cultural studies at Sophia University in Tokyo, who inspected and reported for the UNESCO

1989): “described elements of the Indian work as "unsuitable" and even "primitive," and urged UNESCO to step in”

- Jean E. Launay, (French engineer who worked at Angkor a quarter century ago): “The amount of cement is crazy... The cement ages at a different rate than the sandstone, creating a jarring two-tone effect over time”.

Critiques like these have been heard far and wide. Other issues were noted too. The poor working conditions, including the lack of medical facilities, the limited amount of communication between the field team and Delhi, the extreme weather conditions, and the lack of occupational training were among the obvious concerns. The presence of only 15 Indian professionals (who rotated annually) to oversee work carried out by more than 400 Cambodians working in different parts of the temple hindered the quality of work. The language barrier added to the confusion on site.¹⁹⁸

In these discussions cultural factors, knowledge exchange, the future of A.S.I in Cambodia (affected by its works in India) and how it was received in the India are not encountered. And even despite earning criticism for its work on Angkor Wat, the A.S.I was invited by the Cambodian government to work on another project in the Park.

For Ta Prohm:

¹⁹⁸ Referred from the ‘A New kind of battle rages at Angkor Wat, Politics and conservation mix in a dispute over how to best preserve a Cultural Treasure’, Christian Science Monitor, [http://www.csmonitor.com/1992/0918/18101.html/\(page\)/2](http://www.csmonitor.com/1992/0918/18101.html/(page)/2).

Since 2004 a seven member A.S.I team consisting of an archaeological engineer, a conservator, a draftsman, a surveyor, a chemist, a technician and a mason, have been assisted by Cambodian staff at the Ta Prohm site. APSARA has provided an archaeologist and architect along with 25 unskilled workers, while the other skilled Cambodian workers were contracted by the A.S.I. The Indian team intends to train members of the local community, encourage their participation and create employment to meet future conservation needs.¹⁹⁹

Yet the early 2013 Cambodian workers' controversy regarding their wage payment was a big setback to the Indian team. The controversy²⁰⁰ revolved around 30 of the more than 100 local workers hired who were said to have been unexpectedly removed. According to the Indian team, this downsizing was necessary as the project reached completion. The Indian team claimed they were unaware of the fact that Cambodian law was in effect. Resolution of the controversy involved the Government of India (GOI) awarding benefits but not the jobs back.

¹⁹⁹ Interview with A.S.I's on-site team project leader

²⁰⁰ *Stonewalling at 'Angkor Complex's Temple'* (January 25, 2013), 'Ta Prohm restoration workers go on Strike' (February 6, 2013), 'Manager of Temple Restoration to Take Demands to Indian Embassy' (February 7, 2013), 'Workers Get Benefits, Not Jobs' (May 9, 2013), *The Phnom Penh Post*.



Figure 71: F.R.I scientists training Cambodians about the trees research; Source: Richa Sharma, ‘*Indian Scientists Help Save 131 Trees in Cambodian Temple*’, *The New Indian Express*, http://www.newindianexpress.com/world/article568423.ece#.U0LKY_ldWSo

The team leader, Mr. Devender Sood, who was a senior conservation assistant in the Indian team at Angkor Wat in 1987-88, commented in an interview to the *Indian Express* (a leading Indian daily newspaper) in 2012 that the working conditions at Angkor Wat²⁰¹ were far different from those at Ta Prohm. So when the ICC applauded the work of the A.S.I, his humble response was to call it a team effort that could not have been achieved back then due to the lack of material and workforce, along with security issues.²⁰² The ICC in particular mentioned in their plenary session reports, the following:

Mr. Georgio Croci, an ad hoc expert for conservation from the UNESCO and ICOMOS:

²⁰¹ He was part of the Angkor Wat team in between 1986-1993.

²⁰² Referred from Devirupa Mehta, ‘Wat’s the Good Word for India’. *The Indian Express*, July 29, 2012; <http://www.newindianexpress.com/thesundaystandard/article578572.ece?service=print>.

“I remember the first year there were misunderstandings and the cohesion was not perfect. I want to say that I am very happy after what I saw in previous days, and I think that a balanced restoration has been achieved. We have seen wonderful restoration of the gallery, the third enclosure of the south wing, and also excavation, with the discovery of the ancient drainage system, which will remain visible for the tourists. That is something that did not exist before as there were just blocks on the ground and it was impossible to guess what was under them. That is an example of good restoration work. There were problems with some galleries where it was difficult to tell tourists not to enter. So the design of a light steel propping, indispensable for safety was done, and it now allows people to enter.”²⁰³

Mr. Pierre André Lablaude, and ad hoc expert for conservation for UNESCO:

“I would like to come back to our Indian colleague’s presentation on the trees at Ta Prohm. I believe that the intervention shown this morning perfectly demonstrates that a vegetal heritage such as trees can be analyzed in the same way as a building is... Let's congratulate them for the quality of this presentation.”²⁰⁴

Mr. Pierre André Lablaude:

²⁰³ Pg. 56, 18th Technical Session report from ICC; 2-3 June 2009.

²⁰⁴ Pg. 58, 18th Technical Session report from ICC; 2-3 June 2009. This was part of the general discussion where the ad hoc committee was commenting on presentations on works to be done at Angkor Wat, Ta Prohm and Baphuon. The discussion generally pertained to the presentation by the F.R.I team regarding interventions to conserve the vegetal heritage.

“I must admit that a few years ago when the ASI requested to carry out an anastylosis at Ta Prohm, our *ad hoc* group of experts showed reservation, even concern. Ta Prohm is like an icon, an intangible object, a kind of perfection in this particularly harmonious entanglement between architecture and nature, one which we might have been afraid of disrupting. Following several discussions, an agreement was reached between the Cambodian authorities and the ASI with support of the ICC standing Secretariat, on a middle of the road project, like a judgment of Solomon, which may have seemed hybrid. It included:

- Conservation of the tree canopy;
- Anastylosis of some parts of the building—one gallery and not the other;
- Anastylosis of half of the Hall of Dancers, one half and not the other and some interventions on the causeways and several gopuras.

We (the ad hoc committee for the ICC) have to admit that despite initial concerns, our ad hoc group of experts was very touched by the partnership that the team in charge of the project set up with our group, and with the quality of the work on site, steered remarkably by Dr. Sharma and dynamically managed on site by our friend Mr. Sood.”²⁰⁵

²⁰⁵ Pg. 88, 19th Technical Session report from the ICC, 8-9 June 2010.

These compliments go hand in hand with suggestions to the direction in which the conservation team should proceed, which were as succinctly described by Mr. Giorgio Croci, and ad hoc expert for conservation for UNESCO in the 16th plenary session of the ICC:

“(The ICC) have insisted, on the one hand, the need to seek balance between culture and nature, that is to say, to allow the archaeological structures and trees to live together, and then, on the other hand, to leave the site as archaeological ruins, even if some parts will be partly restored, and then to improve the knowledge of the original conception of the site through archaeological excavation.”²⁰⁶

Following this, talks began in 2011 between the two governments for another conservation project, 164kms (about 101 miles) away.

For Preah Khan Kompong Svay:

The project at Preah Khan Kompong Svay was first mentioned in the 20th ICC technical committee session meeting in June 2011,²⁰⁷ where the Deputy Director General Ms. Juthika Patanakar announced the possibility of increasing the scope of work at Ta Prohm²⁰⁸ as well as take up another monument, Preah Khan, located in Kompong Thom province. Acknowledging the enormity and challenge of the task, she also highlighted the fact that this signaled stronger relations and partnership with the ICC and APSARA.

²⁰⁶ Pg. 35-36, 16th Plenary Session report from the ICC, 15th December 2009.

²⁰⁷ Taken from the mentioned meetings' minutes document.

²⁰⁸ Referring to identifying more locations inside the complex in 2009.

This was confirmed in October 2013, when the Asian Textile Museum was inaugurated in Siem Reap. A spokesperson of the Council of Ministers of Cambodia mentioned the possibility of “India is considering restoring another historic temple of Preah Khan-Kompong Svay in Siem Reap. The restoration of Ta Prohm temple by India has almost been concluded”.²⁰⁹ The question of preserving other historic structures apart from the more popularly known ones in the Angkor Park was first raised in the ICC plenary session in June 2011.

With this information in hand, during January 2014, interviews were carried out in field with the A.S.I team.

E. In the Indian Interviews

The dispute over the Indians' work reflected a larger division within two schools of thought in the preservation community. Some believed the monument needed to be returned as much as possible to its original appearance, while others thought that would do harm and the preferable goal was only to prevent further decay.

Reacting to what most of the critics had mentioned for the Angkor Wat project, the Indian point of view published through newspapers has included a variety of responses.

- Nagaraja Rao, archeologist trained in India and at Cambridge, Director General of A.S.I from 1984-1987: "We were very clear that we wanted to do the work at Angkor Wat... India is emotionally attached to the

²⁰⁹ October 2013, *Southeast Asian Weekly*, *ibid*.

monument. There is so much Indian inspiration." His comments in newspapers and the report he made on behalf of the A.S.I show his inclination towards age-old practices of restoring and almost rebuilding a structure to its former glory.²¹⁰

- V. R. Mangiraj Deputy superintending archaeological chemist led the three-man team of Indian chemists working at Angkor Wat 1992: "The chemicals we use are not controversial... Archeologists don't like chemicals... They think that the vegetation forms some sort of protective patina, but they are wrong. The vegetation destroys the stone and must be removed."²¹¹
- B. Narasimhaiah, reacting to the French's detecting serious shifting of the stones in the 1960's and proposal for the cementing them: "There is no danger to the foundation, we tested and we know." (And on the French architectural drawings from 20 years ago showing dangerous faults in the foundations) "The French had misunderstood."²¹²
Bristling at the criticism: "They don't want Indians to take the rightful credit... We know that the criticisms are superficial so we are not bothered by them. We know that what we are doing is the best for the monument. Let time tell."²¹³

²¹⁰ *NY Times*, *ibid*, June 21st 1992.

²¹¹ *NY Times*, *ibid*, June 21st 1992.

²¹² *NY Times*, *ibid*, June 21st 1992.

²¹³ *Christian Science Monitor*, *ibid*, October 18th 1992.

- The Angkor Wat report published in 1994 by the A.S.I and written by B. Narasimhaiah, commented specifically of the problems faced by the final season team. The male laborers trained by them had stopped coming systematically since February 1993, when they started going to other conservation organizations' worksites within Angkor, who were apparently paying a dollar a day as wages. Moreover as the value of the Cambodian money crashed from 1500 Riel's per US dollar to 5000 Riel, the workers were unhappy about the 1400 to 1600 Riel they received from A.S.I.²¹⁴

Interviews were conducted with the team members present on site and the hired institute²¹⁵ for the Ta Prohm project. Reacting first to the criticism that the A.S.I team faced when working on Angkor Wat, the Ta Prohm project's team leader since 2005 mentioned that the project report published and distributed was not a reactionary measure but something that the A.S.I carries out after completion of every project. The team leader insisted that the international preservation community should have waited for the project report before asserting theories and making accusations. Moreover, he believed that the reason behind the comments 'were due to jealousy on behalf of a particular country namely the French who did not want the work to be carried out by anyone else'.²¹⁶

The present situation is completely different. The work at Ta Prohm being carried out has been approved and applauded by the same set of countries that earlier

²¹⁴ Pg. 83, Narasimhaiah, *Angkor Wat*.

²¹⁵ Forest Research Institute's director during the consultation process.

²¹⁶ Same point raised in Mitra, 'Wat's the Good Word for India', *ibid*.

disagreed with Indian approaches and techniques. So the question arises whether the A.S.I changed its method of working? The answer to this is: not completely.

As the preservation activities at Angkor are now theoretically overseen by the ICC and UNESCO, the approach²¹⁷ to be followed is decided by the group and not by the participating country. In this case, after the project was first awarded to India, after months of consultation with the A.S.I the project was given a green light. This highlights the fact that no country carries out its methods alone, but uses its expertise in the field, in this case the structural conservation expertise of the A.S.I. The current head of the Survey mentioned that he was open to this approach.

The importance of the trees at Ta Prohm has been recognized. They have always been considered part of the setting and removing them was never an option, since the French found it in the late 19th century. The Forest Research Institute (FRI), Dehradun, India, helped in the conservation and management of the trees ‘to gain experience working in a built environment’. The former director of the F.R.I mentioned that ‘initially (the A.S.I) took time to understand the need for preserving the trees in Ta Prohm together with the built up structure, though once they realized its importance, they were very cooperative and responsive’. Dry vegetation is being removed by the Cambodian workers on site to prevent further decay or disintegration of the stones.

A.S.I has hired about 120 workers from the nearby villages, of whom the skilled labor receive \$4 per day, while the unskilled ones are paid \$3 per day. The

²¹⁷ Whether restoration, reconstruction or simply preservation.

workers have no contract and no formal agreement has been signed for their employment according to the Indian team leader. The Indian civil engineer and the Indian draughtsmen on the team mentioned that interaction with these workers has improved primarily because the Cambodians understand certain methods of working, basic English, and the A.S.I staff's knowledge of basic Khmer. The availability of a Cambodian Site Manager from the APSARA is a bonus in daily work. Yet the fact that 'no contract' exists is a sore spot that allowed further prodding. The recent worker controversy underlines this policy's side effects. In the limelight for wrong reasons, this time the Government of India and A.S.I decided to play it by the books, and roped in the APSARA for legal help. Matters were resolved after several months but the team leader refused to comment more, indicating only that there were no problems with the Cambodian workers now and it isn't something that on-site A.S.I members' know about.

What about the training of the staff and labor? The ICC meetings' documents heap praises on the A.S.I team for this advance. On site, the work at hand determined the techniques that were demonstrated to the labor force. The Cambodians are allowed to carry out the work and, as time went by, minimal supervision was needed according to the team leader. Training by the F.R.I was provided mainly for conservation of the trees to participating Cambodians.²¹⁸ The training addressed 400 workers at Angkor Wat although there were no follow-up interviews with Cambodians to confirm what they learned.

²¹⁸Pg. 40, 19th Technical session report from ICC.

The comparison to working methods in India provides a useful point of reference. Interviews carried out with conservation architects associated with the A.S.I in India demonstrate that, although the A.S.I is an important agency in the conservation of archaeological sites of national significance, the organization outsources preservation jobs to conservation architects for certain projects. This is done where funds or employees are on the lower end of the economic scale or where A.S.I jurisdiction doesn't allow proper enforcement. One interviewee in India mentioned a very important circle's heads' ignorance of the topic of 'heritage management'. The reason behind that the A.S.I continues in the fashion it does is because it owns and manages most of the important sites in the country.

The A.S.I has always believed that their projects abroad have had a connection to, or have been influenced by India. Debatable most of the time, there lies an inner incentive, to work in built environments similar to those back at home. Comparing the project at hand to Indian monuments they said makes it easier to understand the layout. They agreed, however, that some construction details were still new to them. Despite this, one team member went out on a limb and claimed that the Cambodia temples were 'easy work (when) compared to the sandstone temples in India'.

Does this comparison in between the architecture and culture seep into their daily lives on site? The team members' response was negative on this count, stating that between site work (from 8am to 3 pm, five days a week) and then office work (up to 6 pm) they practically have no time to socialize with their 'hosts'. The team leader is the person who takes the social calls and 'relations stuff'. The team comes for 7

months or as when a particular service is required, while the leader stays in Cambodia throughout the year, overseeing overlooking the work and returns to India only when called to report. This, in the view of the team leader, is ‘part of his job... and what is told to him’. He doesn’t have qualms but still looks forward to retiring. Inspections from the Indian side are carried out by the Director General who visits twice a year generally about the time of the ICC sessions, in June and December.

The relationship between the A.S.I team and the community was a topic that didn’t ring any bells with or was avoided by members of the team. Almost no community involvement through education or other projects was mentioned by them, although their relation with the APSARA has been nothing but pleasant. Having been received well after Atal Bihari Vajpayee’s (Prime Minister of India in 2002)²¹⁹ foray back into the country to improve relations, the team has been happy to work at Ta Prohm with the Cambodians.

The team leader, when prodded about the future, confirmed the possibility of working at Preah Khan Kompong Svay, which he mentioned was told to him by his seniors in A.S.I in India. He even remained positive when asked about the future of an independent conservation scene run entirely by the Cambodians, though he wasn’t sure of a timeline for this development.

Having covered the Indian official perspective, it becomes mandatory to put down field observations on all of the comments provided above and all that has been

²¹⁹ He offered India’s help after which the country was apparently invited back into the conservation scene as mentioned in Mitra, ‘Wat’s the Good Word for India.’

recorded of the projects elsewhere. This has been covered in the next following section.

F. Observations

Getting people to answer questions or give an opinion about the work carried out by a government agency is not always an easy task. Reactions to the criticism, applause and the future were far and between. Most of the observations made here are either based on what was seen at the work site (at Ta Prohm) or from interviews and research.

Beginning with the absence of site supervision, which was clearly observed, one person was just not enough to oversee all of the activities on a site enclosing more than 600,000 sq. meters area. This was observed in instances like the careless use of a fork lift handling uncut stones, and allowing visitors into the prohibited sections of the temples that were under construction by workers on site.

The absence of a year-round conservation specialist on site by the author (or a manager apart from a specialist) was observed when discussions between the team were overheard regarding the placement of a beam in the gallery of the Hall of Dancers. The numbering apparently was not carried out by the Indian team yet or had been placed there by the workers given its appearance and dimensions matching those of the beam on the opposite side. This was resolved by the team leader, a structural conservationist himself, but the incident highlighted the lack of conservation knowledge on behalf of the team.

Views of the members of the Indian teams were not very forthcoming regarding recent issues or specific questions. This could have been partly due to lack of knowledge on certain bureaucratic matters or their position in the Survey, which doesn't allow them the ability of comment. Their lack of understanding of site duties is also a stark contrast to what an expatriate should have in such a situation. Each of the team members was concerned only with their positions' work, and did not show much interest in the overall management of the site. The lack of participation or sheer withdrawal from any of the host culture's activities shows their lackadaisical behavior in anything apart from their own lives and work.

This extends to the responsibilities for community education aspect too. The pamphlets created for the tourist and the community in general is superficial instruction just giving directions for tourists around the Ta Prohm temple. Other than that, the pamphlets give visitors information about nearby sites.²²⁰ The interpretation center at this site setup by the A.S.I highlights the works undertaken by them and not about the temple history itself. Signages are put up for visitors by the Forest Research Institute to tell them about the trees.²²¹

Another striking matter was the way the workers' incident played out. From the initial disagreement to the hushed up investigation and solution, the whole incident highlights the lack of management expertise and labor rights. A need to revise the approaches of A.S.I is already clear. As one of the interviewees mentioned, 'The

²²⁰ It needs to be highlighted here that the team leader did not mention these despite the questions, but the author found copies of the same in the EFEO library in Siem Reap.

²²¹ The names are painted on metal plates cast in a concrete cylinder, with the metal plates also rusting.

balance between various related fields within the organization is necessary' and 'just technical knowledge might not sail the boat any longer'.

Conclusion:

This chapter provided a close look at the antiquarian techniques and lackluster attitudes of the patronizing, hierarchical organization of the A.S.I. The organization needs to formulate the means to enforce proper regulations overall in the archaeological and conservation scene in India. When it moves outside of its national frontiers, however, whatever technical expertise the A.S.I offers gets hindered by bureaucratic and trivial matters as the ex-Indian ambassador pointed out.

The work carried out by the team at the three sites is outlined in the next section and shows a shift in their approach as they moved to the next temple and what could be expected in the future endeavor.

CHAPTER 5: DETAILED WORK ON THE PROJECTS

Introduction

Work on Angkor Wat was carried out from 1986 to 1993 while that on Ta Prohm has been carried out since 2004. The 3rd temple complex Preah Khan Kompong Svay has been visited but has no preliminary report done for it by the Indian team. This chapter will focus on providing a detailed account of the work carried out by the Indian team on the earlier two temples. It is explained in a manner so as to allow the readers to understand the technical details. These have been tied back to the A.S.I.'s work approach by understanding how their decisions have changed from one project to the other.

A. Angkor Wat

According to A.S.I.'s website, the conservation of Angkor Wat was 'one of the most outstanding projects of the Survey in the foreign countries'.²²² R. Sen Gupta, B.N. Tandon and R. Duttagupta were part of the first three member team (their posts in A.S.I are not known) to report about the temple in 1980. In 1982, K.M. Srivastava and his team prepared a Project Report and 'carried out an experiment on the conservation project'.²²³ This was followed up by a five-member team under M.S. Nagraja Rao to do a final check and make additional observations for the

²²² http://asi.nic.in/asi_abroad.asp, last accessed on February 21, 2014

²²³ http://asi.nic.in/asi_abroad.asp, last accessed on February 21, 2014 also seen in Hazarika Sanjoy, Restoring Angkor Wat, A Vast, Six-Year Job, The New York Times, January 31, 1987; <http://www.nytimes.com/1987/01/31/arts/restoring-angkor-wat-a-vast-six-year-job.html>

comprehensive conservation report. Seven seasons of work have been led by K.P.

Gupta, B.S. Nayal, C.L. Suri, and Barkur Narasimhaiah, from 1986 to 1992.²²⁴

Following the widespread criticism of the work carried out at the temple, the A.S.I subsequently published a detailed project report in 1994. The project given team leader, B. Narasimhaiah, prepared the information but it was not divided according to the phase, i.e. the year or season that they have been carried out in.²²⁵

The expenditure over the seven seasons was recorded as:²²⁶

1986-87: Rs. 27, 21,725

1987-88: Rs. 16, 88,287

1988-89: Rs. 45, 57,421

1989-90: Rs. 71, 55,917

1990-91: Rs. 22, 01,977

1991-92: Rs. 52, 97,066

1992-93: Rs 67, 98,259

The amounts vary considerably and were mentioned to have been accounted from the work that was done for that season.²²⁷ The project report also noted that most of the work done was carried to extend the efforts left by the French. These were then divided into structural and chemical conservation. Water proofing and vegetation

²²⁴ Ibid.

²²⁵ Apparently a project report must be given to deposit in the APSARA library, but due to their recent office shift the documents (Even if submitted late or given at all) were not to be found.

²²⁶ Foreword (xi),Narasimhaiah, *Angkor Wat*.

²²⁷ According to interview with A.S.I team leader on-site.

eradication was carried out in reconstructed areas. The Survey also asserted that the number of dismantled or dislodged members that have been restored are recorded meticulously. Documentation was carried out in each instance of dismantling with proper scaffolding and stacking. In places where it was necessary, water proofing involved filling in the joints and gaps first with sand clay and pointing with cement mortar.²²⁸

The following gives a brief description of structural conservation work carried out during the seven seasons.²²⁹

NO.	WORK
1.	<ul style="list-style-type: none"> • Structural conservation of the stepped embankment of the moat, made of sandstone blocks; reconstruction of eastern embankment from causeway to the point coinciding with the end of the northern wing of the western gateway.
2.	<ul style="list-style-type: none"> • Dismantling and reconstruction of the affected portions of the northern elephant gateway of fourth enclosure on western side, main gateway; • Dismantling and reconstruction of the affected portions of the southern elephant gateway of fourth enclosure on western side, main gateway; • Dismantling and consolidating core of the stepped entrance on west to northern and southern galleries; • In the exterior and interior galleries: the lintels of verandah with semi-vaulted roof between central and north of central entrances,

²²⁸ Pg. 11-16, 17-77, Narasimhaiah, *Angkor Wat*.

²²⁹ Adapted from Pgs. 17-77, Narasimhaiah, *Angkor Wat*.

	<p>reinforcing broken lintel and brackets in the western gateway, restoring flooring between northern elephant gateway and entrance north of central entrance, reinforcing architectural members of the central tower (Gopura) and ones north and south of it, concrete forms added to openings of the top of these towers in place of missing architectural members, foundation protection apron provided between northern elephant gateway and central entrance on east and from the entrance north of central one to the northern elephant gateway on the west.</p>
3.	<ul style="list-style-type: none"> • Reassembling un-numbered dismantled sections of the southern and northern libraries between third and fourth enclosures and replacing missing pieces with laterite blocks, which were also plastered in suitable color for aesthetic value. • Southern Library: <ol style="list-style-type: none"> 1. Dismantling and resetting of plinth portion of all entrance porches, of western façade on north side, and of south-west corner wall; 2. Reconstruction of roof of western <i>mandapa</i> (pavilion) and replacing missing pieces with laterite blocks; 3. Resetting the fallen <i>torana</i> of the northern <i>mandapa</i>; 4. Missing architectural members of the roof cast in Reinforced Cement Concrete (RCC) of the south entrance porch. • Northern Library: <ol style="list-style-type: none"> 1. Dismantling and resetting of the members of the verandah with a semi-vaulted roof at north-east corner; 2. Dismantling and consolidating of the core of the northern side plinth;

	<ol style="list-style-type: none"> 3. Dismantling and resetting of entire roof of western porch and setting the pillars and columns to plumb; 4. Mending and <u>casting</u> new pillars; 5. Whole monument water-tightened by grouting and pointing and flooring was also conditioned.
4.	<ul style="list-style-type: none"> • Cruciform terrace, just outside the west entrance of the third enclosure: <ol style="list-style-type: none"> 1. Dismantling and resetting of the members of the north-eastern and north-western corners, missing blocks replaced with laterite ones; 2. Steps of the south entrance was reset after consolidation of core; 3. Removing and relaying the stone floor slabs on the south-east corner; 4. Resetting the uprights and horizontal members of the <i>Naga</i> railing; 5. Four circular pillars mended and reused in reconstruction.
5.	<ul style="list-style-type: none"> • Third enclosure: <ol style="list-style-type: none"> 1. Dismantling and resetting of western and northern stepped entrance and porches at north-west corner, between north-west corner and western central entrances, at northern and eastern stepped entrance porches at north-east corner, between north-east corner and eastern central entrance porches; 2. Water-tightening of western central stepped entrance porch and south-west and western central entrance porch, eastern central porch; 3. Dismantling, resetting, consolidating and replacing missing

	<p>blocks with laterite ones of the western stepped entrance porch at south-west corner and northern central stepped entrance porch;</p> <ol style="list-style-type: none"> 4. RCC pillars cast-in situ for the entrance of the eastern central porch; 5. Platform of scaffoldings erected to support dislodged members of the eastern central porch; 6. In the <i>Samudramanthan</i> gallery (southern gallery on eastern side) they continued the reconstruction of the superstructure left midway by the EFEO, redressed pillars to keep structure in plumb, reset the floor and water proofed the structure; 7. Dismantling and reconstructing the entrance pavilion north of the <i>Samudramanthan</i> gallery, flooring re-laid and structure water tightened; 8. Dismantled southeast corner pavilion (structure south of the gallery) was reconstructed; 9. Continued reconstruction work of eastern entrance porch of the gallery, flooring re-laid and pillars erected in position; 10. Dismantling and reconstruction of southern entrance porch at eastern corner (southern side of eastern pavilion), of the south central eastern porch, of inner entrance porch on the southern side, of southern inner entrance porch on eastern side, of the central inner eastern porch on the eastern side, of the northern inner entrance porch on eastern side, inner entrance porch on northern side; 11. Damaged pillars/pilaster strengthened in the southern inner entrance porch on eastern side, south central eastern porch;
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	<p>12. Bas-reliefs consolidated, vaulted roof supported of the south-west corner entrance pavilion- its roof, two walls and lintels (<i>toranas</i>) were dismantled and reconstructed (the interior pavilion and the exterior semi-vaulted verandah);</p> <p>13. Tie-beams brought to plumb (dismantled and reset) in western gallery and steel rods also provided for support of these tie beams apart from the same procedure in the eastern gallery on northern side (third enclosure);</p> <p>14. Northern and southern galleries on the western sides' (third enclosure) tie beams were freed from external added support and fixing their joints with epoxy resin and steel dowels;</p> <p>15. Provision of steel clamps for uppermost course of the semi vaulted roof of the northern gallery on eastern side (third enclosure) and mending of cracks in pillars and tie-beams with concealed steel belts.</p>
6.	<ul style="list-style-type: none"> • Southern and northern libraries between second and third enclosures: <ol style="list-style-type: none"> 1. Dismantling and resetting of the northern and southern stepped entrance in the southern library; 2. Northern library: major portions dismantled and reset (after consolidating the core) of the southern façade, of the south-east corner of massive plinth, whole of the northern façade (including the plinth and steps, balustrades), of the eastern façade (including plinth, stepped entrance and balustrade) and the whole of the western façade (including the massive double plinth, stepped entrance, massive balustrades, landings, entrance porch and the topmost <i>toranas</i>); 3. Dismantling and resting of the topmost <i>torana</i> with some

	<p>deteriorating members chemically consolidated;</p> <ol style="list-style-type: none"> 4. The southern portion of the entrance portion: supported from the inside, debris cleared, plinth and flooring was dismantled and reconstructed, extant portion dismantled and systematically stacked 5. Dismantling, consolidating and reconstruction of the plinth and stepped entrance of the library
7.	<ul style="list-style-type: none"> • Antechamber (cruciform gallery) between second and third enclosures: <ol style="list-style-type: none"> 1. Dismantling and resetting of the northern and southern stepped entrance; 2. 28 interior pillars of the gallery strengthened by provision of concealed steel belts and mending while missing members of the verandah roof were replaced with in-kind RCC ones; 3. The new laterite block platform constructed before the A.S.I in the gallery was removed (apparently they were requested by the Cambodian authority for the removal in 1992-92, but work was carried out in 1992-93 season).
8.	<ul style="list-style-type: none"> • Second enclosure: <ol style="list-style-type: none"> 1. Dislodged members reset in the stepped eastern entrance at north corner, in the eastern central entrance, in the eastern entrance at the southern corner, southern entrance at west corner, in the north-west exterior corner; 2. Dismantling and resetting of the stepped southern entrance at east corner, western entrance at south corner; 3. Documentation and reconstruction of the fallen members of the southern central entrance area including the steps, strengthening

	<p>and mending of the front and side beams and reconditioning of flooring;</p> <ol style="list-style-type: none"> 4. Dismantling and resetting of the western and northern stepped entrance; 5. Dismantling, core consolidation and resetting of the northern central entrance with other works pending due to shortage of time; 6. Raking joints, removing heavy vegetation, resetting dislodged members, covering up the top of the tower (due to missing members) by providing RCC slabs to prevent rainwater entering into the structure and the provision of concealed steel rods to deteriorating stone members of the north-west, south-west corner tower, south-east and north-east (dismantled <i>toranas</i> were also reset here); 7. Roofs of all galleries were water proofed.
9.	<ul style="list-style-type: none"> • First enclosure: <ol style="list-style-type: none"> 1. The dislodged members of all five towers (36 meter in height) were reset with large crevices and gaps filled in with cement concrete, degenerated stones strengthened with concealed steel rods; 2. Roofs of all galleries were water tightened with some dislodged members reset.
10.	<ul style="list-style-type: none"> • Railing between third and fourth enclosure: <ol style="list-style-type: none"> 1. The earlier dismantled and partially reconstructed stepped entrance at north-west and south-east corners was again dismantled and reconstructed due to errors visible in the earlier work and due to the deteriorating core of members,

	consolidation was carried out by providing laterite blocks.
11.	<ul style="list-style-type: none"> • Provision of expanded welded mesh at particular height where the wall and the spring-level of the vaulted roofs met in certain places in the first (tower, axial verandahs, <i>garbagrihas</i>) and second (northern and western galleries) enclosures.

Table 1: Work carried out by the A.S.I from 1986-93; adapted from text in B. Narasimhaiah, *Angkor Wat India's Contribution in Conservation*. 1986-1993.

The chemical conservation projects were carried out on the monument after studies were carried out by the Geological Survey of India (G.S.I). The Survey staff collected over 100 stone samples from nine different parts of the monument and carried out a petrologic study in its southern region branch in Hyderabad. Analysis for micro-vegetation growth was also carried out in A.S.I labs and in the Department of Microbiology in Osmania University, Hyderabad.²³⁰

The chemical preservation mainly dealt with either physical decay or chemical decay. Physical decay included erosion (seen mostly in the five towers of the first enclosure and places exposed to the rain) or exfoliation of rock surfaces (*Naga* balustrades) and moisture levels within or through the stone (which was found to be minimal). The chemical decay was reported to be due to the presence of moss, lichens, algae and fungi on the entire surface of the temple and also seen as moss patches in the interior. This along with decay caused by excreta of bats and birds was

²³⁰ Pg.78-79, Narasimhaiah, *Angkor Wat*.

considered as an accelerant to the wide scale deterioration of carvings, reliefs and decay in general.²³¹ The chemical treatment involved the following steps:²³²

- 1) Moistening surface by spraying water.
- 2) Cleaning of area with a 1-2% solution of liquid ammonia mixed with *Teepol* (non-ionic detergent) by brushing gently with nylon/tooth/soft coir (natural fiber extracted from the husk of a coconut) brushes as situation demanded. Liquid ammonia was used to neutralize acids secreted by the hyphae of the micro-vegetation.
- 3) Thorough cleaning with water again.
- 4) Cleaned area then treated with 2% solution of chemicals such as polycide, biocide and zinc silico and fluoride separately.
- 5) Finally after complete drying of the area, it was sealed by applying a coat of 2% of polymethyl methacrylate in toluene.

Some before and after images of the work done from 1986-1993:

²³¹ Ibid.

²³² Pg.80-81, Narasimhaiah, *Angkor Wat*.



Figure 72: Stepped embankment of the causeway in the moat at Angkor Wat with (A) before and (B) after the conservation process; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

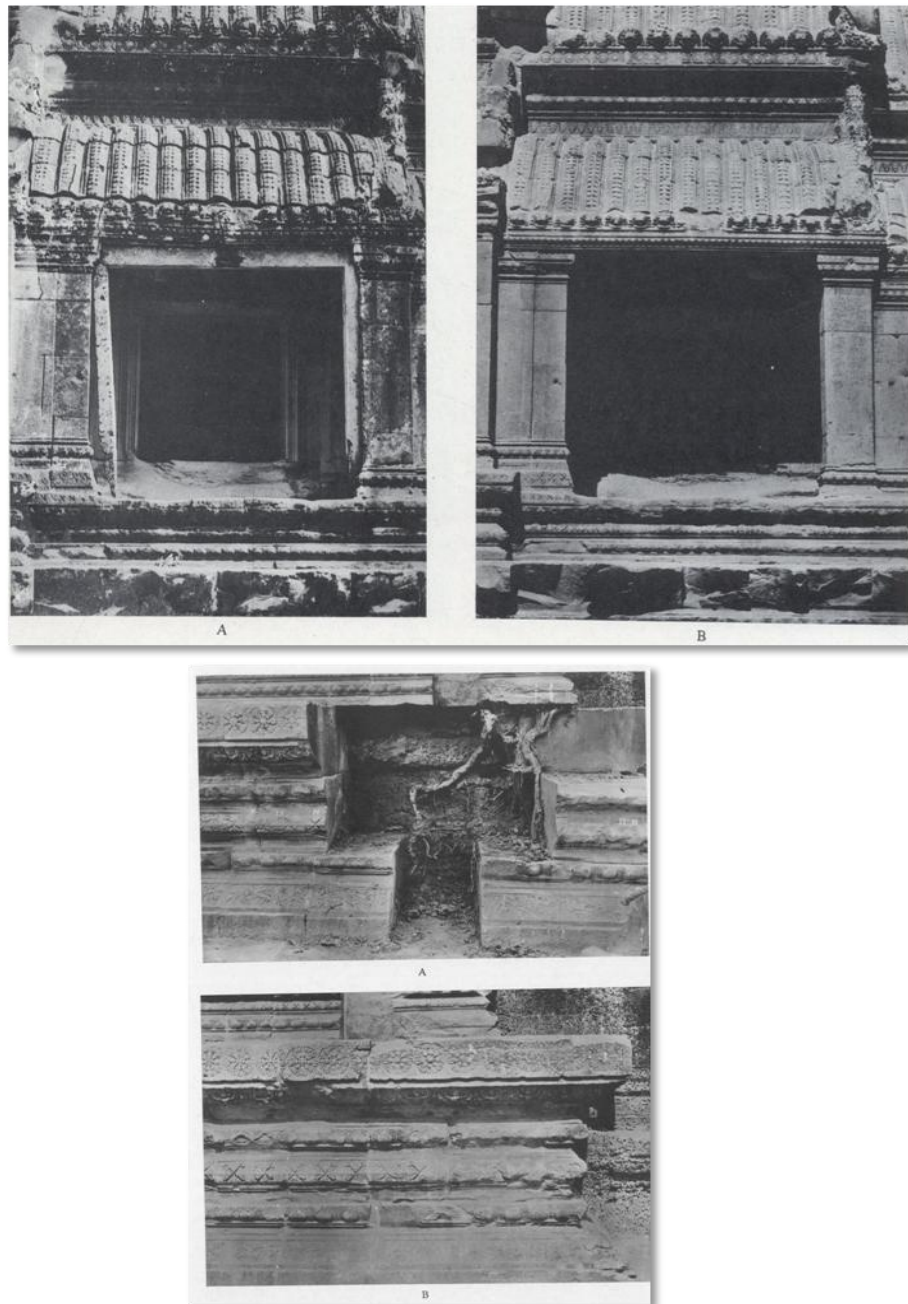


Figure 73: Fourth enclosure Western Gateway, on bottom is seen the plinth of the southern corner pavilion and on the top picture beam of the semi-vaulted roof was corrected as seen in before (A) and after (B) pictures; Source: B.V. Narsaimah, *Angkor Wat, India's Contribution in Conservation*.



A

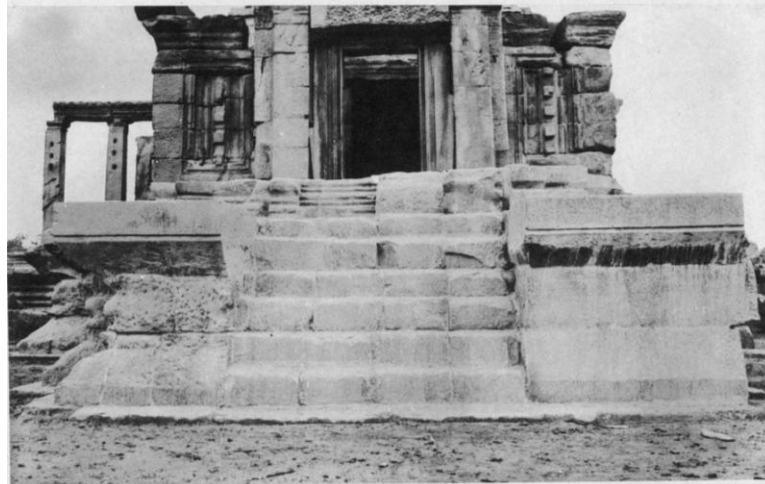


B

Figure 74: Southern library between the third and fourth enclosures: western mandapa (pavilion), A and B before and after conservation; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.



A



B

Figure 75: Northern library stepped entrance A, before and B after conservation;
Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

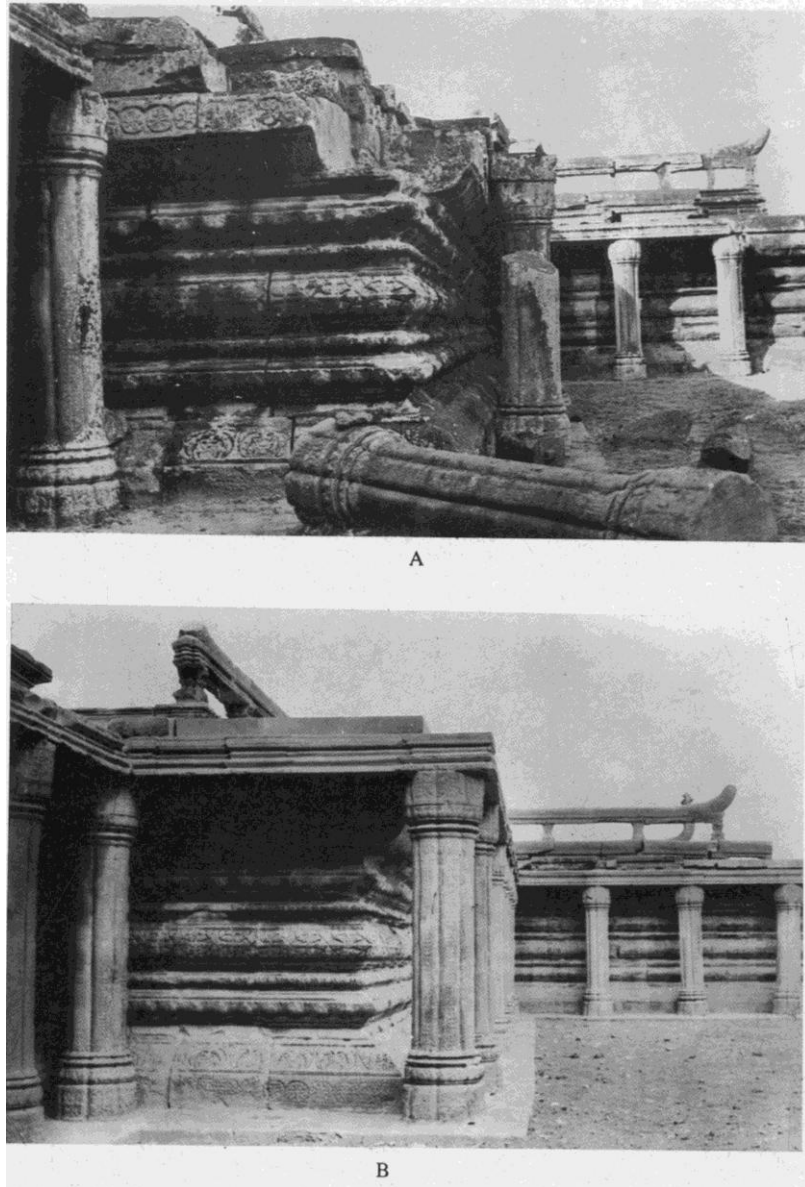
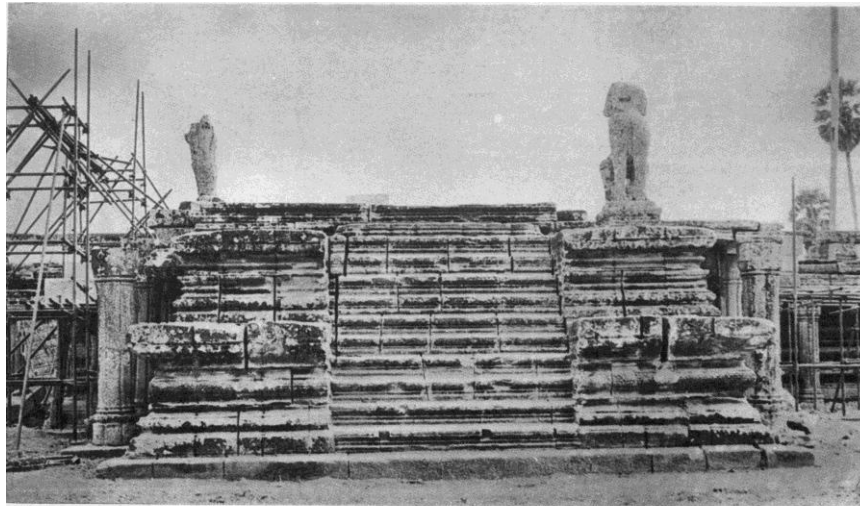
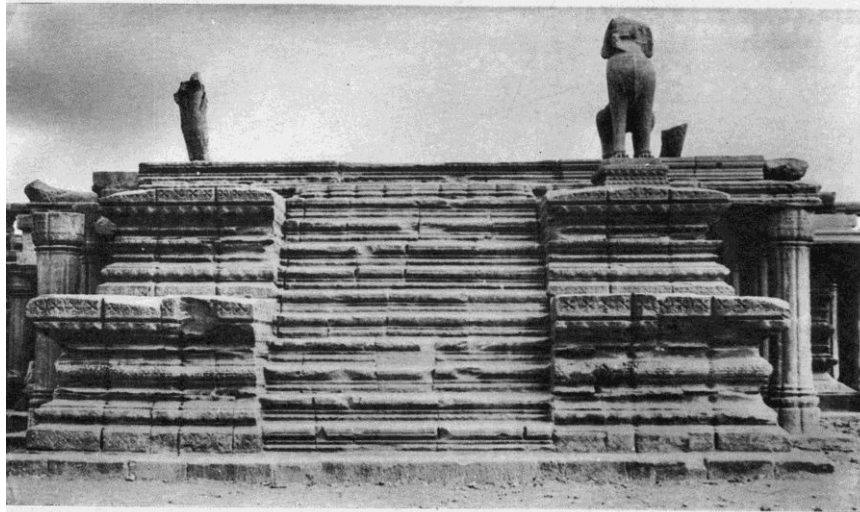


Figure 76: The cruciform terrace right before the third enclosure, north-eastern portion, A before and B after conservation; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.



A



B

Figure 77: The southern stepped entrance of the cruciform terrace before the third enclosure's western gateway, A before and B after conservation; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

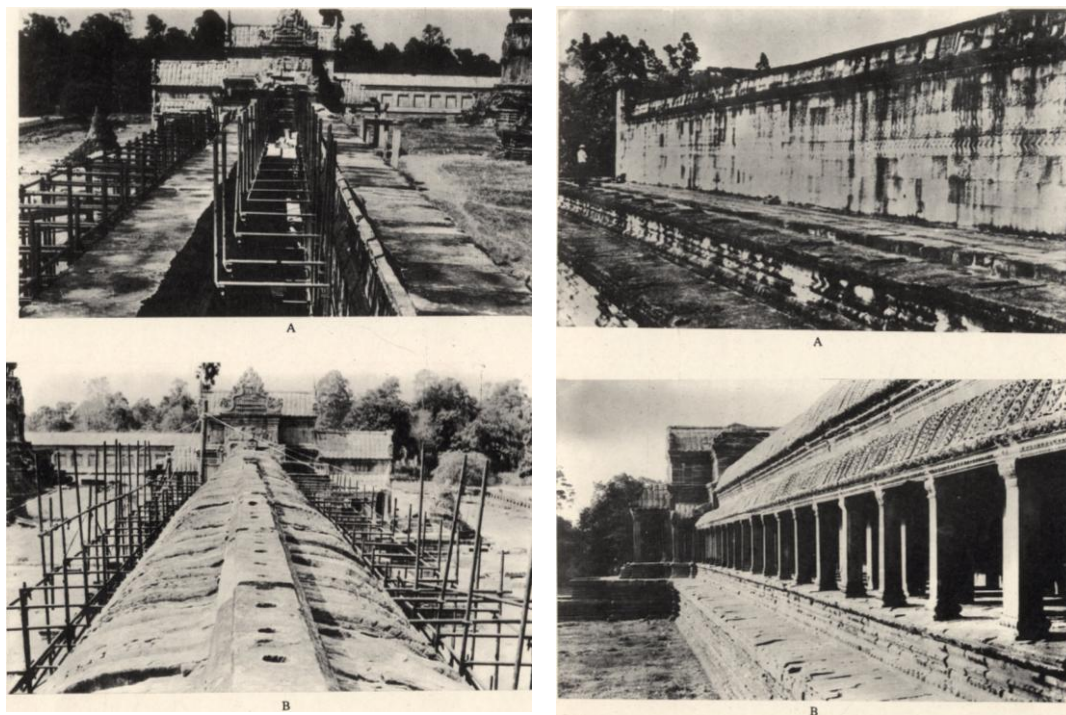


Figure 78: Third enclosure's southern gallery on eastern side, A before and B after conservation; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

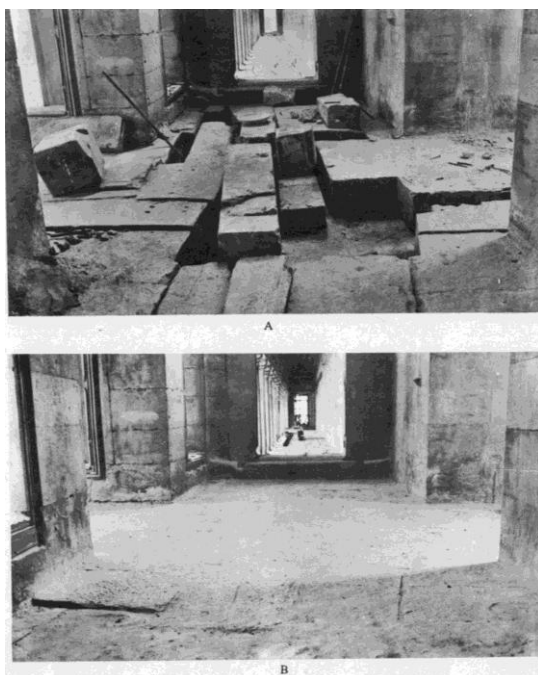
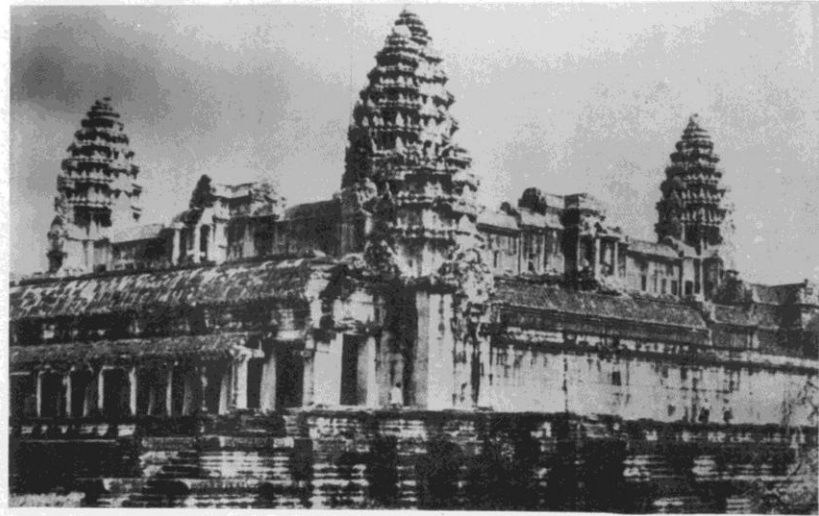
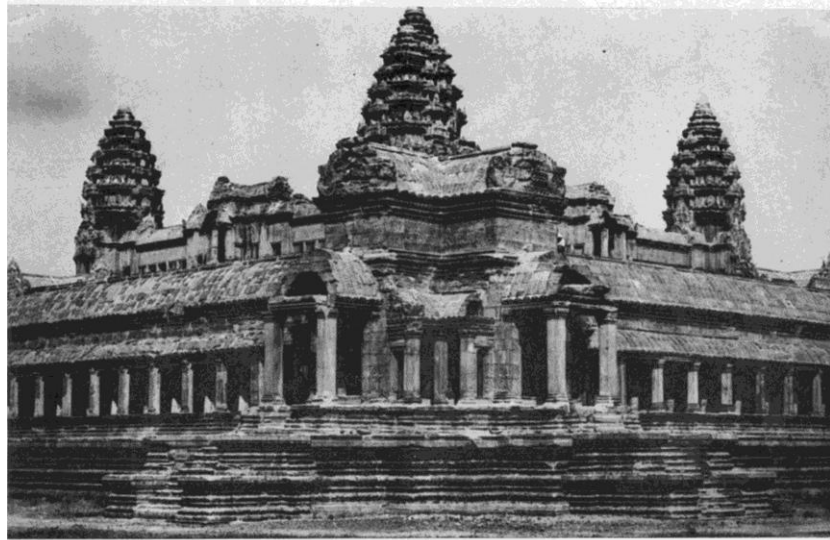


Figure 79: Third enclosure flooring in one of the entrance pavilions, A and B before and after conservation; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.



A



B

Figure 80: The third enclosure's southeastern corner pavilion with porches, A, before and B, after conservation; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

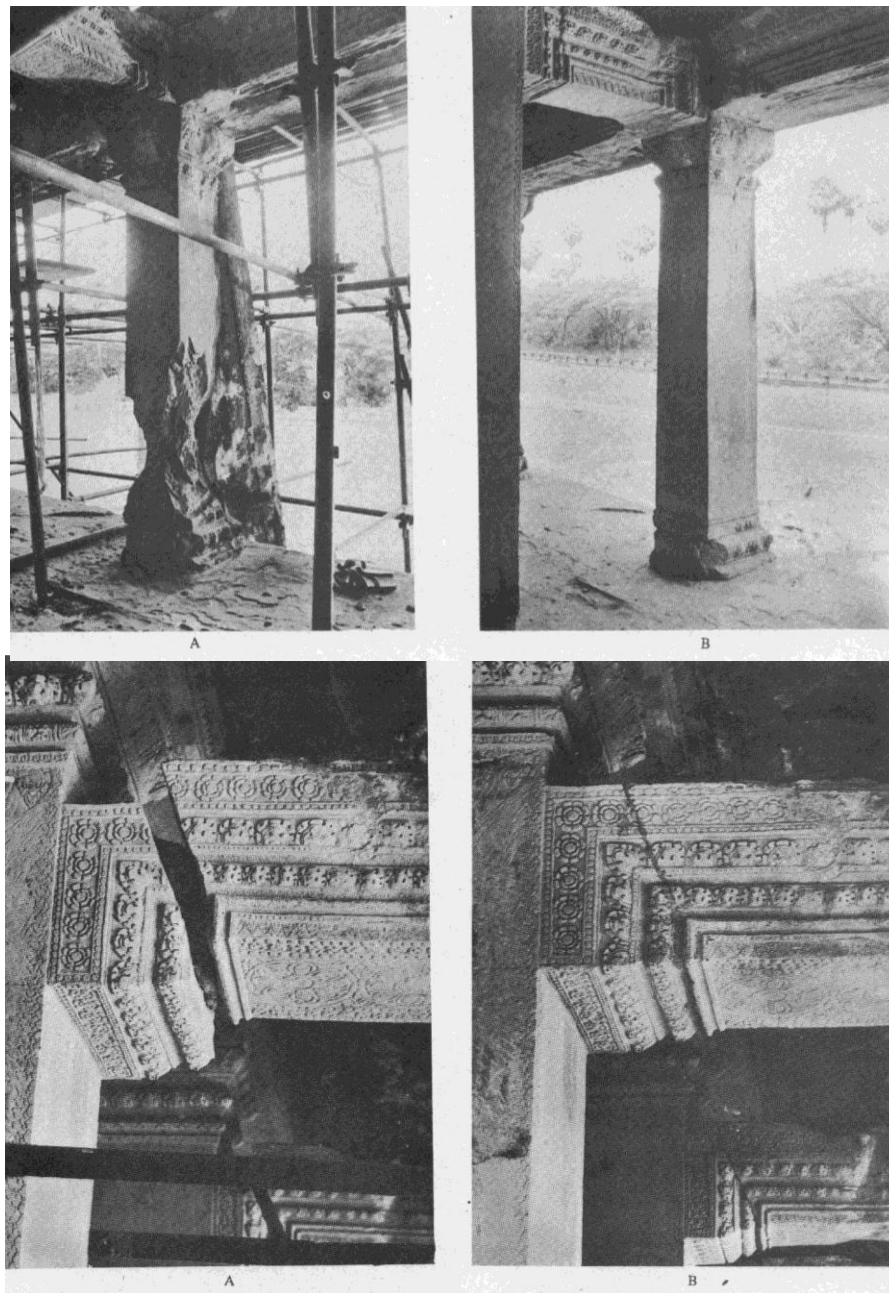


Figure 81: A column and beam in the western gallery of the third enclosure, A before, and B after conservation; Source: B.V. Narsaimah, *Angkor Wat, India's Contribution in Conservation*.



Figure 82: South-central stepped entrance of the second enclosure, A, before and B after conservation; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

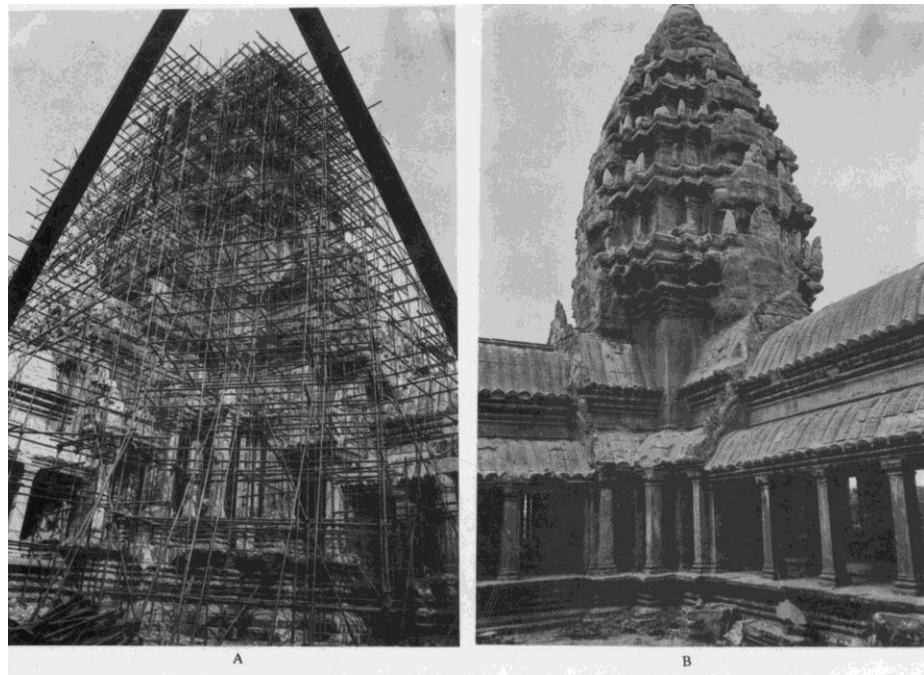


Figure 83: Central tower during (A) and after the chemical treatment (B); Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.



Figure 84: Western gateways apsaras, A, before and B after chemical conservation;
Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

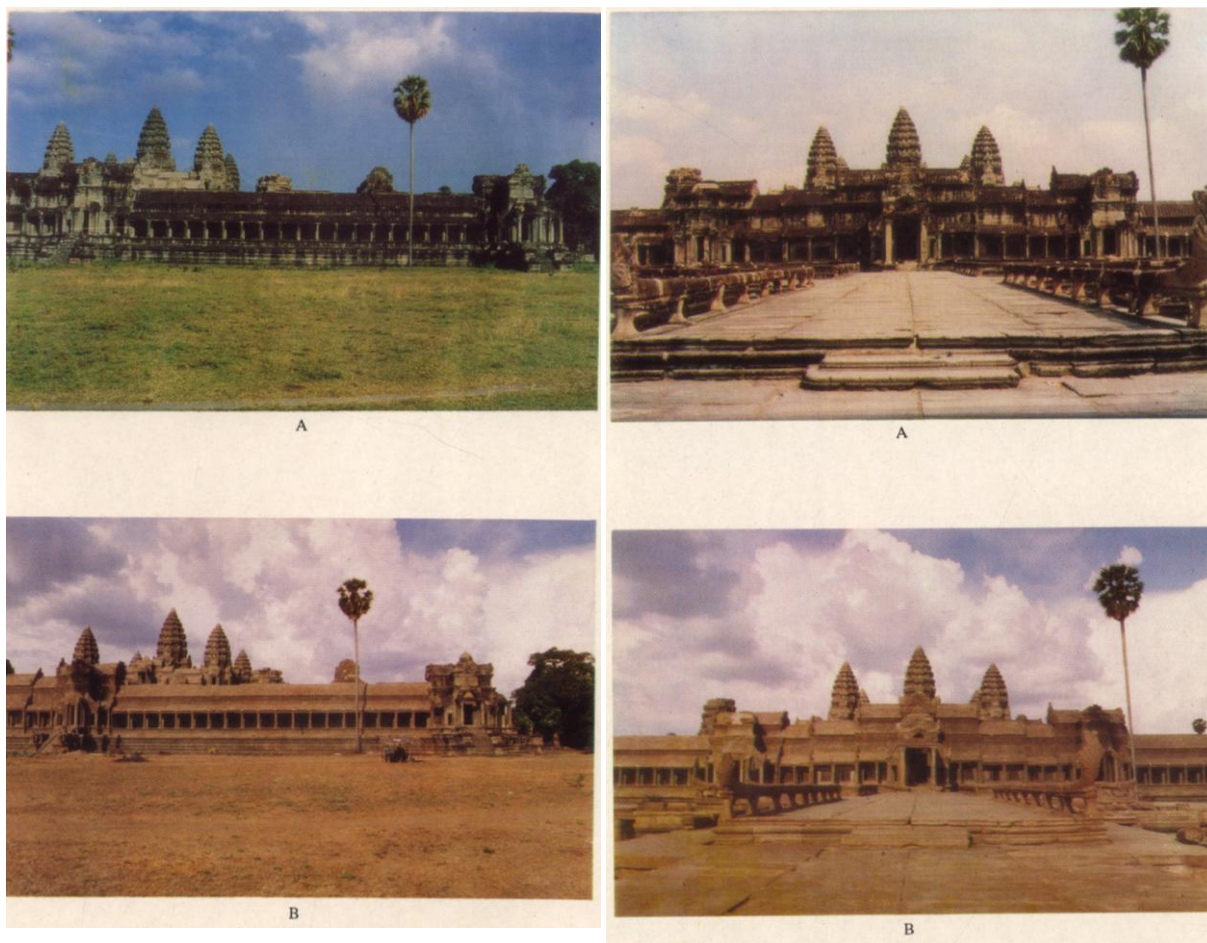


Figure 85: A stark difference in the complex is seen in these, A, before and B after, chemical conservation photos, on the left of the third enclosure taken just after the treatment was finished by the A.S.I team; Source: B.V. Narsaimah, Angkor Wat, *India's Contribution in Conservation*.

The chemical cleaning was carried out over an area approximately 200,000 sq. m. Having acknowledged the fact that the cryptogamous growth was reappearing on the surface of the stones within a few years itself, the A.S.I report claimed that as the growth was deep rooted, similar chemical conservation would have to be repeated several times to fully eradicate the problem.²³³

²³³ Pg. 81, B. Narasimhaiah, *Angkor Wat*.

It should be noted here that the A.S.I used in Cambodia almost the same techniques it uses on designated monuments in India. Its apparent show of having control in news articles in 1987, especially over the use of chemicals, contrasts to the views presented at the end of the A.S.I report: that of a probable mistake. Though this is not to undermine their efforts, it is to be noticed that in this first project there is no mention of the A.S.I having taken advice from other agencies who could have provided expertise in particular arenas. It highlights the A.S.I's approach to have a job done within its organizational folds rather than ask for assistance. Technical details in the restoration works seem to have followed the conservation practices that the A.S.I still follows in India. The chemical process involving clearing of all types of hindering vegetation resonates with the importance it gives to the aesthetic nature of the structure.

At Ta Prohm this changes with work being outsourced for different sections of the conservation project and advice taken from a broader community of experts.

B. Ta Prohm

In the early months of 2001, M.C. Ragavan, a library expert with extensive experience in India who ran the documentation center for the ICC at Siem Reap, expressed the view that the ICC had made several attempts in the past few years to get

the Indian authorities to send another team to the Angkor Park.²³⁴ There was no response for a long time.

After a visit to the Angkor Wat in July 2001 by Komal Anand, then acting Director-General of A.S.I, "possibilities" of cooperation in conservation activities opened up again.²³⁵ Two visits by Indian officials followed in 2002, after which the Ministry of Culture responded to the requests to participate in the conservation and restoration of the Ta Prohm complex in cooperation with the APSARA Authority under the supervision of the ICC. The project was to be led by the A.S.I and the costs of technical experts including, their allowance, air fare, material, and equipment, was to be borne by the GOI.

The MoU²³⁶ signed between the governments stated they would cooperate in exchange of personnel and information concerning administrative and financial management. Conservation, maintenance and development of the historical archaeological monuments were to be carried out between the agencies. Visitor facilitation and information centers were to be set up with the GOI's aid and training and exchange of museum personnel were also to be carried out during the course of the project. As part of the wider agreement the publication of scientific communications, research programs, literature and catalogues, organizing and

²³⁴ Darryl D' Monte, "Monumental Decay", *Frontline*, <http://www.frontline.in/navigation/?type=static&page=flonnet&rdurl=fl1819/18190650.htm>; last accessed on February 15, 2014.

²³⁵ Ibid.

²³⁶ Referred from Archaeological Survey of India. 2005. *Project Implementation Program, Conservation and Restoration Plan of Ta Prohm Temple, Siem Reap Cambodia*. Government of India. (Annex 2 Article 3).

exchange of exhibition and workshops, collaboration in developing websites was also to be carried out. The agreement also contained an interesting clause in it, which stated to ‘allow the use of serviceable tools and plants left behind by the A.S.I team while working on the conservation of the Angkor Wat temple, Siem Reap during 1986-1993’.²³⁷ This indicates the use of old-fashioned (some of which whose uses were questioned in the previous jobs) tools as a possibility in the new job, a question left unanswered in the interviews.

The restoration work formally began in February 2004 after discussions with the ICC. Importance was to be given to the protection of the more than 150 trees with proper arboriculture studies. Anastylis was to be carried out in the proper places. These remedies were categorized into:²³⁸

- A. structures encroached upon by trees-to be conserved in present condition with no major repair;
- B. structures in complete state of ruin: to be conserved in their ruinous state with no restoration work to be undertaken with vegetation preserved around it; and
- C. structures not encroached by trees-can be restored to retain original architectural features.

The other major consideration was the water inundation within the temple during the monsoon period. Recommendations were also given for tree monitoring, lime grouting, equipment, and material handling, and manpower management. The

²³⁷ Referred from Archaeological Survey of India, *Project Implementation Program*, and Annexure 1 Article 5. These categories were deemed correct in discussions with mainly the ICC, Cambodian input in these are not known.

²³⁸ Pg. 52-55, Archaeological Survey of India, *Project Implementation Program*.

mention of manpower, focusing on capacity building of the local community, was also made to involve Cambodians in skill-transfer.

The work was divided into five phases of two years each with conservation work carried out in two locations due to space constraints. The detailed phases are itemized as follows:

SR. NO	TIME PERIOD	WORK
1.	2004-2005	<ul style="list-style-type: none"> • Geotechnical, structural, hydrological and botanical studies; • 2D, 3D laser scanning, graphic and photographic documentation; • Ta Prohm symposium at the site through the ICC and its meetings; • Renovation of office and library building and other preparatory works undertaken; • Conservation and restoration works commenced with the third enclosure, eastern side, south wing- documentation, trial excavation, lifting of collapsed stone materials and stacking it in respective bays; • Construction of site office cum interpretation center; • Emergency measures included documentation and lifting of the stone materials lying in the moat, provision for facilitating visitor movement;

		<ul style="list-style-type: none"> • Documentation work for the third enclosure, eastern side, north wing and central pavilions.
2.	2006-2007	<ul style="list-style-type: none"> • Restoration and reconstruction of third enclosure, eastern side, south wing: included excavation/scientific clearance of earth deposits; • Provision of facilitating visitor movements; • Drainage/ surface water management continued; • Conservation of third enclosure eastern side, north wing and central pavilions started in first phase, completed in this phase along with excavation of earth deposits; • Emergency measures included the construction of wooden bridge, repair and up gradation of approach road; • Documentation and dismantling for third enclosure, southern side, east wing to commence; • Documentation, dismantling and resetting sunken dislodged causeway with all conservation processes for causeway between third and fourth enclosure; • Machinery and heavy equipment procured in this phase as per requirement.
3.	2008-2009	<ul style="list-style-type: none"> • Restoration and reconstruction of third enclosure, southern side, east wing completed along with excavation/scientific clearance of earth deposits; • Conservation and restoration works for the third enclosure, western side, south wing including

		<p>documentation dismantling pavilion gallery and excavation and clearance of earth;</p> <ul style="list-style-type: none"> • Documentation and dismantling of third enclosure, western side, north wing; • Documentation and dismantling and resetting sunken, dislodged causeway with all the essential conservation processes for causeway between third and fourth enclosure to be completed in this phase; • Partial dismantling and reassembling of loose dislodged gateways, towers, galley floors, etc. for east gate. West gate of fourth and fifth enclosure, towers and galleries within third and second enclosure to be started in this phase.
4.	2009-2010	<ul style="list-style-type: none"> • Conservation and restoration works for the third enclosure, western side, south wing commenced in third phase to be completed in this phase including restoration and excavation of earth; • Conservation works for third enclosure western side north wing started in third phase to be completed here including restoration of collapsed vaults and dismantling pavilion gallery; • Documentation of fallen western gallery and partial restoration of central tower with all essential conservation processes for the first enclosure and central tower to be started in this phase; • Documentation, partial dismantling with other essential conservation processes for Hall of Dancers

		<p>to be started;</p> <ul style="list-style-type: none"> • Partial dismantling and reassembling of loose, dislodged gateways, towers, galleries floors, etc. for East gate, West gate of fourth and fifth enclosure, towers and galleries within third and second enclosure started in third phase to be continued in this phase.
5.	2012-2013	<ul style="list-style-type: none"> • Restoration/reconstruction of fallen western gallery and partial restoration of first enclosure and central tower to be completed in this phase; • Restoration/reconstruction with all essential conservation processes for Hall of Dancers to be completed in this phase; • Restoration and reconstruction works for dislodged gateways, towers, gallery floors, etc., for east gate, west gate of fourth and fifth enclosure, towers and galleries within third and second enclosure to be completed in this phase; • Entrance <i>gopuras</i> facing east and west are to be restored in this phase; • Chemical conservation and preservation which included cleaning and applying stone preservatives to be carried out in this phase.

Table 2: Work carried out by the A.S.I from 2004-2014; Source: Archaeological Survey of India. 2005. *Project Implementation Program, Conservation and Restoration plan of Ta Prohm Temple, Siem Reap Cambodia*. Government of India; submitted at APSARA library, Cambodia.

The project report included information regarding research, documentation, and publicity and awareness components, including brochures, information leaflets and publicity materials in all the phases. These were to include seminars, workshops, lectures, exhibitions, ICC visits, etc. organized each year with provisions for conducting training programs for students and technicians for skill transfer, including payment of remunerations, travelling expenses, and scholarships, in each phase.²³⁹ Mention was made of undertaking ‘establishments’, administrative and project management components. The total expenditure of the project was estimated for Rupees 21,50,00,000²⁴⁰, subject to variations due to unforeseen circumstances.

As the work continues on the temple some images representing the work on different sections of the temple are shown below:

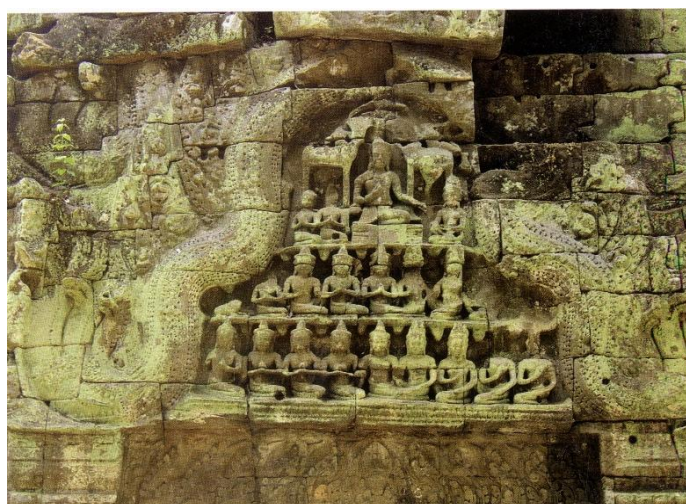


Figure 86: Pediment on the false door in the southern wall of the Hall of Dancers;
Source: A.S.I, *Ta Prohm, A Conservation Strategy*.

²³⁹ One was held in India by the FRI to train two Cambodians on the studies and maintenance of trees. Remaining seminars, etc. have happened on site according to interviews.

²⁴⁰ Referred from the *Archaeological Survey of India*. 2005. *Project Implementation Report*. Rs 21,50,00,000 is US \$ 94,884,725,000 if the 2005 exchange rate of 44.115 is applied.

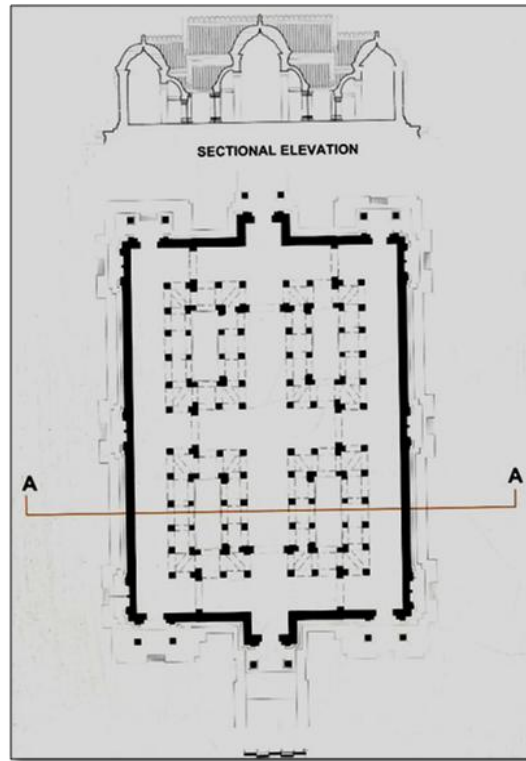


Figure 87: A section and plan of the Hall of Dancers to indicate the gallery with side aisle formation; Source: A.S.I, *Ta Prohm, A Conservation Strategy*.



Figure 88: Trial pits excavated to expose the plinth of the temple by the A.S.I during the first phase of works; Source: A.S.I, *Ta Prohm, A Conservation Strategy*.



83 Lifting of stone from eastern side of 3rd enclosure, (south wing)



Figure 89: Lifting and stacking of the eastern side of the third enclosure's south wing during the conservation process; Source: A.S.I, *Ta Prohm, A Conservation Strategy*.

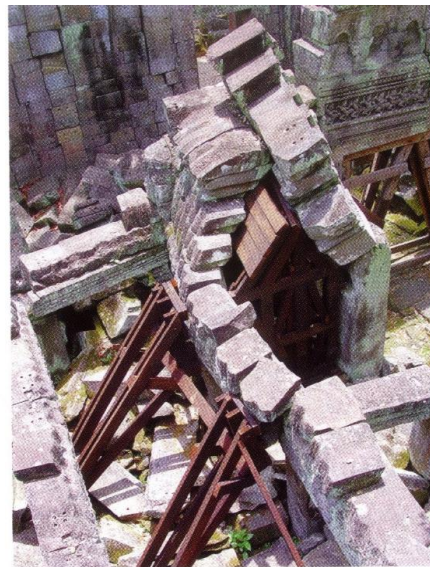
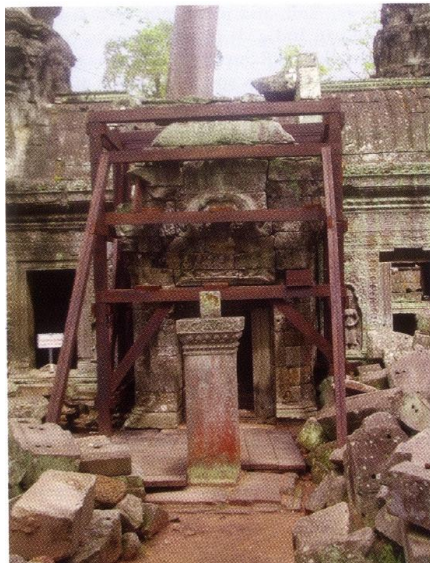


Figure 90: Some of the emergency measures used to prevent further falling of the stones, etc., on left wooden props hold together the corner pavilion entrance of the first enclosure and on the right is at the hall of dancers, both done in the first phase of the project; Source: A.S.I, *Ta Prohm, A Conservation Strategy*.

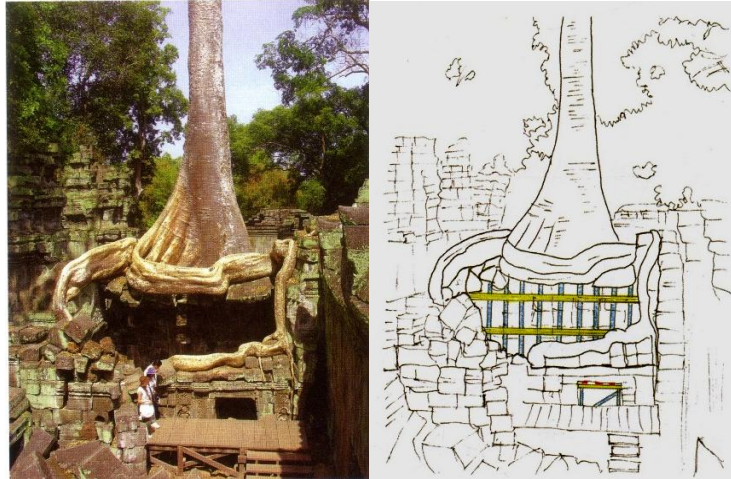


Figure 91: Timber I-beams were installed to support unstable blocks, which in turn rest on steel rakes and props. These trees have been the major attraction of the site, hence the decision was made to protect the trees rather than remove them; Source: A.S.I, *Ta Prohm, A Conservation Strategy*.



Figure 92: The supported structure and the opening below the vaulted gallery are also supported; Source: Author.



Figure 93: Water stagnation in the Hall of Dancers on the left and on the right between the second and third enclosure (photos taken before water management was done by the WAPCOS); Source: A.S.I, *Ta Prohm, A Conservation Strategy*.



Figure 94: Wooden staircases and platforms erected throughout the complex to facilitate visitor movement. These also have sign boards to indicate what to see and directions to go to. In the top picture is part of the wooden platform with a green sheet on the right covering the work being done on the Hall of Dancers while on the bottom is the northeastern section of the third enclosure; Source: Author.



Figure 95: Supports provided to trees by the Forest Research Institute within the fourth enclosure; Source: Author.



Figure 96: A sign board showing the conservation process of the entrance gopura of the fourth enclosure that was restored by the anastylosis method done by the A.S.I; Source: Author.



Figure 97: A sign board showing the conservation process of the causeway connecting the third and fourth enclosure on west that was restored by the anastylosis method done by the A.S.I; Source: Author.

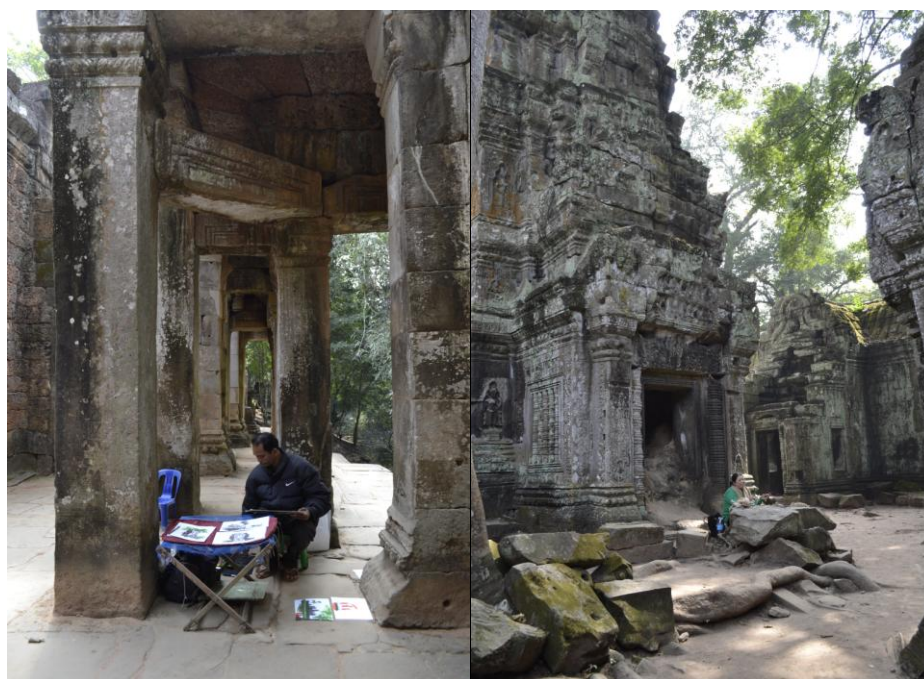


Figure 98: The temple complex is being used by the locals to sell their wares despite being prohibited by law. On the left is in the western entrance of the fifth enclosure and on the right is within the south satellite enclosure; Source: Author.

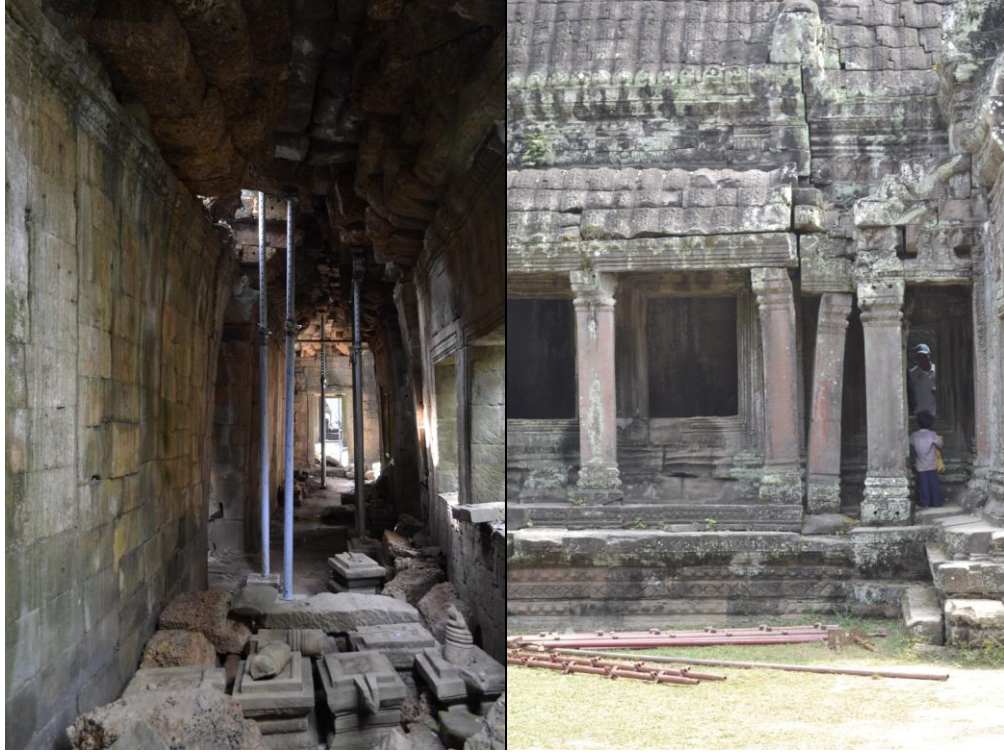


Figure 99: As most of the temple is under ruins, only some places have been supported. On the left is in the 1st enclosure additions to its eastern side while on the right is the southern wing at the western side of the third enclosure; Source: Author.

Overall, the project seems to have been going efficiently (i.e. if one doesn't consider overall site management concerns pointed out earlier) with issues being resolved with assistance from the ICC. The A.S.I changed its stance from following the Indian 1923 conservation manual to accepting a broader range of possibilities in work methods as seen in their anastylosis techniques, something that wasn't carried out in the earlier project. Even the restraint from cleaning up the whole monument and not even suggesting the same, shows their inclination to continue working in Cambodia. This remarkable shift from their earlier approach might suggest a new possibility of working style in their next project.

C. Preah Khan Kompong Svay

The site is currently accessible only by drivers who know the path to the temple and is 3-hours away from the main Angkor era temples. Amidst rubber plantations (that are Vietnamese owned and cultivated) the approach is a much bumpier ride than what tourists to Angkor would expect. Projects to improve the road and bridges, forests and in general living conditions in the neighboring villages have been underway at least since 2009.²⁴¹

The temple complex had been cleared of explosives by the mine-clearing agency, Cambodia Mine Action Centre (CMAC), although it hasn't been studied in detail by any organization. There is passing mention of the site being studied by explorers in the late 19th century,²⁴² but the lack of dimensional drawings is noticeable. Angkor's iron industry²⁴³ has brought interest to the area, often studied in terms of the iron producing society of the *Kuoys*. To preserve it, however documentation of each and every stone along with its deterioration is a must.²⁴⁴

The present condition of the temple suggests that it would need more than just one small five member team and more than the normally applied techniques of restoration and reconstruction used in the Angkor Park.²⁴⁵ Ms. Juthika Patanakar

²⁴¹ Seen from signages put up on these works during site visit in January 2014.

²⁴² Pg. 178, Jacques and Lafond, *The Khmer Empire*.

²⁴³ Referred from Hendrickson M., Hua Q., and Pryce T.O. 2013. "Using in-slag Charcoal as an Indicator of "Terminal" Iron Production within the Angkorian Period (10th-13th centuries AD) Center of Preah Khan of Kompong Svay, Cambodia". *Radiocarbon*. 55 (1): 31-47 *Preah Khan Kompong Svay*. 2013.

²⁴⁴ In 1995 an army general reportedly plundered the place to steal *apsaras* in turn breaking stones and causing greater damage, according to an interview.

²⁴⁵ In this case the reference is to the process of anastylosis that has highly been preferred in the Park, but as the stones at Prasat Bakan mostly lie broken and scattered, a new method of documentation and restoration would be needed, one that might involve the use of another agency to consolidate or join pieces for each block of stone in the complex.

(Deputy General, A.S.I in 2011) in her introduction at the ICC meeting addressed this:

‘My colleagues here in Cambodia will in the future put forth a comprehensive proposal in this regard and present it to the APSARA Authority for their consideration.’²⁴⁶ Awaiting this report, one can only hope the A.S.I takes up this challenge and develops a new method of management as a possibility.

Conclusion:

The A.S.I’s changing approaches in the field is not generally known. Given the criticism that it receives from within India the advance that A.S.I is making in international projects such as those in Cambodia, deserve greater attention. Simultaneously the lack of interest that the A.S.I has in other international projects happening literally in their backyard in Cambodia need to be examined and the techniques adopted when it appears appropriate. The technical details spelled out here along with the observations made earlier show the changes that have occurred in the A.S.I’s approach over the course of two different temples. These could have happened due to the involvement of an international agency but validates an altogether new study in India with the work being done on World Heritage sites by the Survey.

As the focus here is in Cambodia it is clearly visible that, with international scrutiny, the A.S.I easily adapts to newer styles of working and also eases its guard on what work to carry out, not over or under-reaching. This brings us to the discussion of the Cambodian organization, APSARA, and its involvement in the conservation works.

²⁴⁶ Pg. 27-28, 20th Technical Meeting ICC, June 8-9th, 2011.

CHAPTER 6: THE CAMBODIAN PERSPECTIVE

Introduction

Today the APSARA has many responsibilities, distributing the time and talent of its employees to meet the needs of the people who have become involved professionally with the monuments, as well as those who are tourists. This chapter will convey the APSARA officials' point of view on their history, conservation efforts, work and their relationships with the community. It will also cover views from people indirectly associated with the Authority and how they are affected by certain decisions. Along with this the APSARA official's views have been asked about the Indian work.

A. APSARA, the Cambodian Organization

The inscription of the Angkor period structures on the World Heritage in Danger List was due to the physical threat²⁴⁷ to them in after the Khmer Rouge. This imminent threat led to the Park and its structures remaining on the list for the next ten years. The establishment of the International Coordination Committee for Angkor (ICC-Angkor) led to the establishment of a national authority in charge of the Angkor Archaeological Park, the Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA).²⁴⁸ This body was created in 1995 by Royal Decree. A second Royal Decree reinforced its authority in January 1999. APSARA is now under the double supervision of the Presidency of the Council of Ministers (technical oversight) and the Ministry of Economics and Finance (financial affairs).

²⁴⁷ Mostly from the environment and no proper maintenance for the structures.

²⁴⁸ Referred to as Authority or APSARA here after.

The Director General of APSARA serves as the President of the Administrative Board, which oversees operation and activities. APSARA is responsible²⁴⁹ for:

- protecting, maintaining, conserving and improving the value of the archaeological park, the culture, the environment and the history of the Angkor region as defined on the World Heritage List;
- refining and applying the master plan for tourist development according to the five zones, defined in 1994 in the Royal Decree on the protection and management of Siem Reap-Angkor and taking action against deforestation, illegal territory occupation as well as anarchy activities in Siem Reap-Angkor;
- finding financial sources and investments;
- participating in the policy of cutting down poverty with the Royal Government in Siem Reap-Angkor;
- cooperating with the Cambodian Development Council on the investments of all the projects that are involved with APSARA Authority's mission; and
- cooperating with ministries, institutions, funds, national and international communities as well as international governmental institutions and non-governmental organization on all projects related to APSARA Authority.

The term "Siem Reap-Angkor" is defined in the Royal Decree with boundaries and specific Protected Cultural Zones, with five degrees of protection in the region. It represents the Cambodian delegation to the ICC, and its Technical Committee.

²⁴⁹ http://www.autoriteapsara.org/en/apsara/about_apsara/history_organization.html, last accessed on February 28, 2014

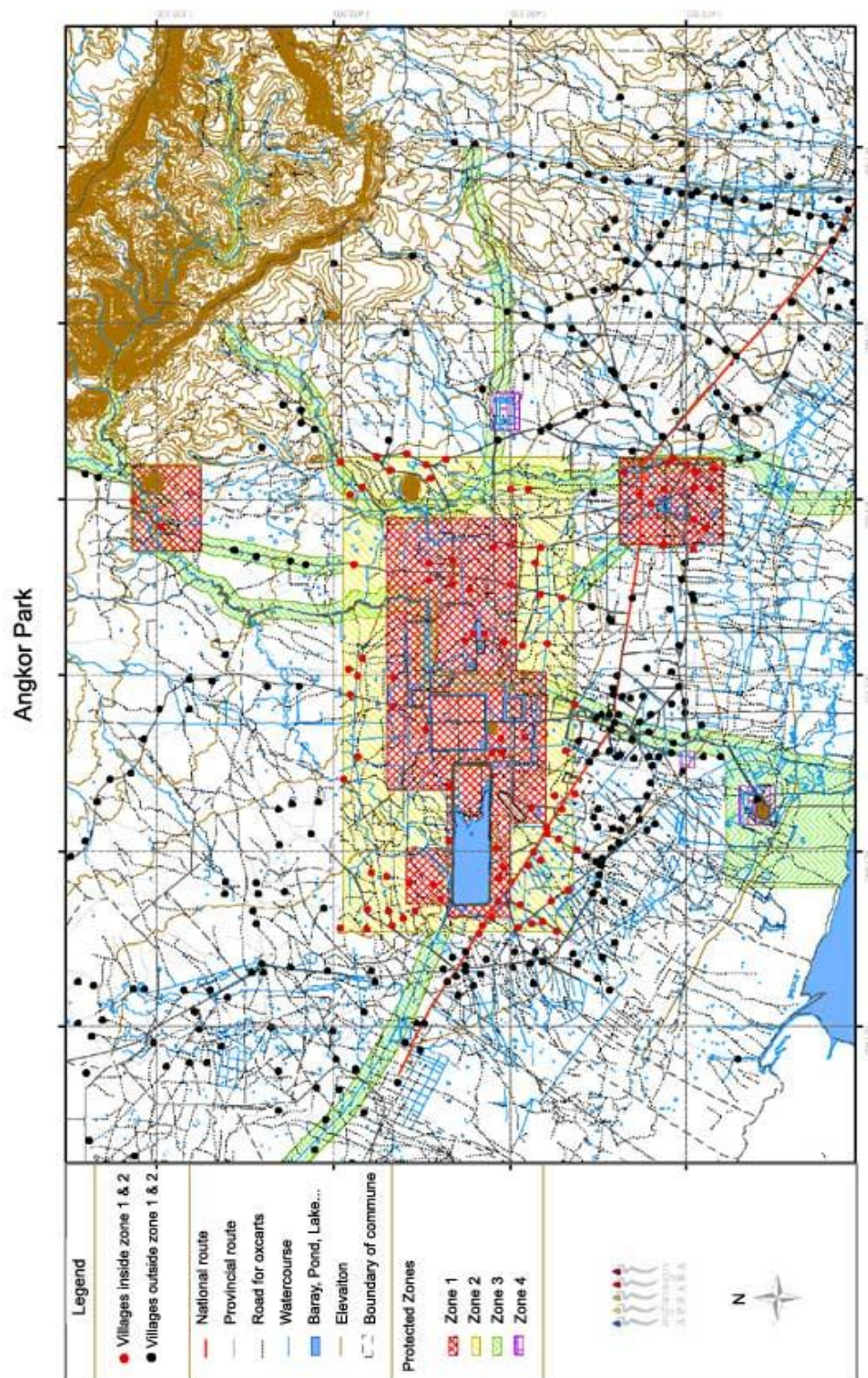


Figure 100: A zoning map of the Angkor region; Source: APSARA,
http://www.autoriteapsara.org/en/apsara/about_apsara/legal_texts/decreec3.html

APSARA has expanded from its original four to 15 departments with over 3000 employees. These are divided into the following divisions:

1. Department of Conservation of the Monuments in the Angkor Park and Preventive Archaeology;
2. Department of Tourism Development of Angkor;
3. Department of Land Planning and Habitat Management in the Angkor Park;
4. Department of Agricultural and Community Development;
5. Department of Water Management;
6. Department of Management of Forestry, Cultural Landscapes and Environment;
7. Department of Public Order and Cooperation;
8. Department of Cultural Development, Museums and Heritage Norms;
9. Department of Development of Urban Heritage of Siem Reap;
10. Department of Conservation of the Monuments outside of the Angkor Park;
11. Department of Administration, Personnel and Materials;
12. Department of Finance and Accounting;
13. Department of Communication;
14. Department of Inter-sectorial Projects and Technical Support; and the

15. Angkor International Research and Documentation Center.

APSARA also plays an important role in proposing projects that could be taken up by member countries of the ICC.²⁵⁰ This is an important procedure for which they carry out an initial research.



Figure 101: A 2001 postage showing an apsaras dance performance in the Angkor Wat; Source: http://www.postcardscrossing.com/2012_09_01_archive.html

One of APSARA's primary goals according to its website and resonating in the interviews conducted for this study has been to provide “training of Khmer nationals in all domains of research, restoration, conservation, and management involved in their operations.”

The main intention behind the international support was to give the Cambodian government a supporting hand to prepare a new generation of professionals to take over these specialized tasks. However, local controversies mire the Authority in the

²⁵⁰ Mentioned in an interview with deputy director general of Department of Land Planning and Habitat Management on January 7th 2014.

region's affairs. The Siem Reap residents mainly those around the Park, have little faith in APSARA's policies and finds the regulations lacking enforcement.²⁵¹



Figure 102: The new APSARA compound is located around ~24kms away from the Angkor Park with each building (i.e. a department) having approximately 5 to 15 employees around, but not at the same time; Source: Author.

B. The Approach

To understand the Cambodian viewpoint, interviews were conducted with individuals inside of APSARA. It was necessary to keep an open mind and accept their approach to the work they did. Understanding basic Khmer in such a scenario was useful as it gave an opening to conversations as well as allowed the welcomes to lead into the lines of inquiry. However the interviews were carried out in English only.

²⁵¹ Referred from Baillie, Britt, 2005. *Angkor Wat Conserving the Sacred? A Relationship Between Buddhism and Heritage Management*. (Master's thesis, University of Cambridge)

The questions were mostly open-ended allowing the interviewer to steer the conversation according to the inclinations of the interviewee. Though most of the interviewees answered the questions only indirectly or with qualifications, some of the answers were very straightforward. Apart from the six APSARA officials, an employee who no longer works for the organization was interviewed, along with informal question with vendors and ticket checkers in the temple complexes. All interviews were carried out in January 2014. These small conversations with the people who had no knowledge of the conservation work often had to be coaxed into providing their views.²⁵²

C. Cambodian Views of Their History and Its Conservation

The interviews conducted confirmed previous studies²⁵³ indicating that the common man in Cambodia remains very ignorant about major parts of the country's history, although he is still proud of what he knows. The knowledge of history often related to their age and education. More schools are now teaching 'Angkor' in their subjects. Middle aged people, on the other hand, were not forthcoming or plain ignorant of the subject.

When officials associated with the APSARA were approached about the subject of Cambodian history, a hint of pride was seen. Yet they were not fully forthcoming on the history but ended discussing associated topics, such as the importance of archaeology, ceramic pottery, and sculpture. The head of a tour guide

²⁵² A reason for their not being open could also be that they were afraid of what they said could affect their jobs.

²⁵³ Referred from Pg. 85 onwards (interviews) Baillie, *Angkor Wat Conserving the Sacred*.

association mentioned that most of the guides have an interest in history. Even among the people who live in the park boundaries, if given proper compensation,²⁵⁴ would be willing to move, he said, indicating their appreciation for their heritage.²⁵⁵

Knowledge of the EFEO, which spearheaded preservation activities for more than 60 years, is deficient. It is difficult to find Cambodians who worked back then; the names of those workers were not recorded in any documents. However, contact was made with a three Cambodians²⁵⁶ who had seen the French' work. These individuals have been educated in either the French or English or German institutions of higher learning and have spent time away from their country learning.

The Director of a department in APSARA, with more than 35 years of experience, commented on the French activities during the 20th century. Given his position in the organization, it is clear he can't be pointing fingers, yet he echoed what the Indian project (at Ta Prohm) team leader said about the controversy of Angkor Wat.²⁵⁷ "Politics and jealousy" were the main factors behind the French's intentions, which 'pressurized Cambodia into involving teams from around the world, not just the Indians'. He also mentioned that in the 100 years of the French working at Angkor, there has hardly been a single Cambodian given complete training. Before the establishment of a department of archaeology at the University of Fine Arts (Phnom

²⁵⁴ In terms of alternative land arrangement, construction materials, basic amenities like electricity and water and proximity to a market and school, paraphrased from interview with the guide.

²⁵⁵ Regulations by the APSARA that do not allow construction of new buildings using certain materials within the Park boundary.

²⁵⁶ Three in particular.

²⁵⁷ This refers to the criticism received by the ASI in the early 90's.

Penh) in 1965 to train archaeologists, no Cambodians were expected to play a meaningful role.

The head of the Stone Conservation at Angkor Conservation mentioned having worked with the Indian team at Angkor Wat from 1987-88. He explicitly talks about the history of conservation training done by the Indians. After being trained by them at Angkor, he subsequently went on to work with the Germans (1988-93), the Hungarians (1994) and then again the Germans. All of his stone training happened at Angkor Wat. As he received training from three different teams over time, he commented about how different each of their approaches were. Although he doesn't complain about any ones' approach, he did express skepticism about the activities of the Indians. "They did the best they could to work with what was available to them and now consider having learned what to be avoiding to do when conserving stone". He did comment on the fact that he shared a good rapport with the Indian team.

As mentioned earlier, none of the officials who were interviewed discussed the country's Angkor and recent history unless prodded. On this also one of the interviewees expressed pride in the ingenuity of the water system constructed in the Angkor Era and of the temples construction. He mentioned how, after the recent conservation works (he wasn't specific), no flooding has happened in the Park in the last two years.

D. Cambodian Views on the APSARA Conservation Efforts

The Cambodian interviewees were also asked about their views on APSARA. This was done mainly to get them to ease up and comment on the other countries.

During these conversations, it was stated that the officials have no ‘police control’, reinforcing observations made by the tour guide. APSARA has little ability to enforce regulations to protect the Park. The lack of funds was repeatedly mentioned as the biggest hindrance to begin to follow the numerous ideas they have for development. The workers hired by APSARA earn less than \$2 a day if unskilled and \$200 a month if skilled. The officials are no better off, as a recently hired employee mentioned. Having three jobs himself, he mentions how 40% of the employees at APSARA have at least two jobs and the remaining 60% might have their own side business. It should be noted that all of this is happening in spite of being illegal according to the law. The Angkor Conservation APSARA employees are getting part of their salary from the Ministry of Culture and the other half from the Germans, as they are currently working on a project.

One Cambodian suggested that the Park boundaries are very constricting as many archaeological remains are found throughout the nation so that APSARA needs to expand its geographical limits. The organization does not have the work force to do this. More workers are joining the APSARA, but the organization has no proper training program. For stone training most of them are sent to the Angkor Conservation.²⁵⁸

Several Cambodians had observed the nature of the conservation trainings of India and other countries. Two mentioned how this is mandatory for the work, but often the visiting countries do not provide sufficient training to a worker. Training

²⁵⁸ The same is under the Ministry of Culture and not the APSARA.

pertains only to the job at hand and this doesn't help the worker when at another site. In relation to the workers controversy at Ta Prohm, the Cambodians indicated that every individual country needs to have contracts for the workers and information about long and short term hiring. The Indian issue at Ta Prohm was settled when legal aid was given to A.S.I by the APSARA. It highlighted the misunderstandings in recruiting people from nearby villages by any country.

Worker problems still arise, often due to the inconsistent manner, in which different countries make payments. Despite having workers join the organization over time, many of the interviewees expressed concern over certain countries paying more than what other countries and especially more than what APSARA could afford. This led to workers leaving APSARA as well as shifting sides on sites at which they have been already working. It is becoming a problem because once the project is over and the countries' teams leave, the workers are left with no job at hand. Most come back to APSARA, but some find jobs without any contracts, which make the whole agreement and labor hiring process a lot more difficult.

As APSARA gets more involved²⁵⁹ in decisions concerning new projects, as well as being involved as partner to the international teams on different sites, the appreciation of the international community resonated in their interviews. The Cambodians appreciate outside help through finance and conservation expertise. As one said, 'it's a different way of learning'.

²⁵⁹ Still controlled heavily by the ICC.

Another director at APSARA stated there has never been a better time than now. “Keep in mind the situation of the country, it’s just growing finances, which means sharing of resources is possible but as all income can’t be used for heritage thus international funds are needed”. He claimed that the organization and country is on the “right track but making slow progress.”

E. APSARA’s Relationship with the Community

In this progress the organization is believed to be making, the community plays a very important role. This discussion focused mainly about the people living inside the Park boundary, the tour guides, and the vendors. An alternative conversation carried out during site visits with these community members included especially the hawkers, ticket checkers, security guards, statue guardians’ and tuk-tuk drivers.²⁶⁰

As much of the work force in the conservation sites is from nearby villages, it becomes apparent how much the industry is affecting their lifestyle. Hawkers selling bamboo bangles, guide books and palm-sugar juice are generally from nearby villages. They mentioned walking to the temples to sell their products. Most of them lived with their extended families in structures in the Park that were either ‘not big’ or far from their work. These make their residences within the regulated boundaries of the Park. The protected cultural zones established around the Angkor temples, do not allow development of any sort,²⁶¹ but this affects the people who wish to ‘repair their leaking

²⁶⁰ One or two of each of these groups were approached; tuk-tuk refers to a motorcycle with an open trailer/cabin attached to its rear.

²⁶¹ Article 4, from the Royal Decree Order for Protected Cultural Zones in the Siem Reap/Angkor Region with guidelines for their management;

roof or broken door'. According to one tour guide who has been in the business since 1992 and also had a house in the Park, people not being allowed to carry out simple repairs by an over-strict management at APSARA. Though as mentioned earlier they are willing to leave the Park, provided they are given proper compensation, the residents yet find it difficult to make changes to their homes when needed.

To counter this, an official from APSARA mentioned that the villagers are “slow in reception and don’t want to leave their ancestral land or their families”, making it a difficult process overall. He mentioned that the residents have the misconception of construction of new buildings, and that they often apply for construction of a new structure instead of repair. This is allowed by the APSARA outside the Park boundary. The residents who agree to this ‘voluntary movement’ are provided “with a piece of land provided for a new structure along with agricultural land.”

In addition to these issues, there are the community-capacity building projects. The same official indicated this is carried out only in places under APSARA jurisdiction and that new committees have been formed. Educational development also included providing assistance to archaeology students and interdepartmental training at the University of Fine Arts in Phnom. Onsite training for specific works is to be provided by the international teams just before work officially begins on the site. Although there is no systematic component of community projects, each of the international partners is asked to consider the community before, during and after the

project. This is to be done via educational projects, training hired workers and/or volunteers in conjunction with schools or directly the APSARA or the Cambodian Department of Education.

The Department of Land and Habitat Management of APSARA is currently working with 13 villages around and in the Park, educating them about how the conservation work is in their interest and negotiating with them on factors like their land and houses in case of migration. Aiding the Department of Land and Habitat Management is the Department of Communications in spreading the knowledge about their heritage. Since 2004 these departments have been providing them technical assistance in their social activities and businesses to increase their participation in the conservation field.

APSARA has also partnered with the Thailand government in the Living Angkor Road Project (LARP).²⁶² The department head presenting at a conference²⁶³ in January 2014 demonstrated how this project, mainly focused around the Angkor-Phimai road' villages from both countries aiming at training students (elementary and high-school) to be researchers. The Project provides them with the equipment as well. The results of the project, which began in 2007, are yet to be tangible, but it promises to have “inculcated appreciation of heritage in students, to protect and preserve it, while enhancing the relation between the two countries.”

One ex-employee of APSARA, an archaeologist who worked with the Indian team, confirmed all of this, but was skeptical about the outreach. He mentioned that

²⁶² More can be known through the Departments at APSARA.

²⁶³ IPPA conference in Siem Ream, January 2014.

the “normal education system doesn’t reach everyone²⁶⁴ and that just one organization (APSARA) isn’t able to provide extensive heritage education to all.”

Unfortunately APSARA hasn’t been able to show a tangible effect in community development, because the organization has not developed a framework for evaluation. Other projects, like introducing audio tours and a parking lot further from the temples, haven’t sat well with the guides or drivers. The tour guide association head mentioned that APSARA doesn’t do a good job of keeping them updated about such new developments.

Amidst all of these speculations, growth is still something the interviewees looked forward to seeing. With growing international scrutiny in more than just its temples, i.e. in tourism and heritage management, the pressure to carry out field studies and improvements might just improve the performance on APSARA.

F. Observations

There has been no comprehensive report on APSARA’s work so far by the ICC, involving their policies, structure, operations or new ventures. This can be understood as a matter of diplomatic relation and a ‘no interference policy’ as the ICC is under the United Nations umbrella. Yet, given APSARA’s often strained relations with the general public, this avenue needs to be explored.

In the past 20 years of international preservation activities there has been no opportunity given to the Cambodians to carry out a complete conservation project. Even being a major part of the conservation team could finally allow them to take over

²⁶⁴ Not all children are able to go to schools as one is not present in their villages.

the project rather than just talk about the need ‘to conserve their own heritage’.

Interviewed officials were ambitious yet constrained by lack of ‘real’ authority they have in the field. Moving ahead by, doing bits and pieces of stone work, for example, in replacing stone heads on the *samudra-manthan* gallery, is not enough.

Although this study is not dealing with the political atmosphere and pressures in Cambodia, it appears the laws governing the Authority are becoming an issue. With the proper enforcement of laws and regulations the country could get a firmer control and better appreciation in field.²⁶⁵ The leeway around these should not be allowed for anyone. For example, the lack of supervision is seen where ticket checkers try to become your protectors and guides to earn an extra buck, or on-site employees take visitors into restricted sections of a temple. Most of this could be a result of the low wages and almost no incentive for the employees to follow the rules.²⁶⁶

Another disconcerting observation was the insufficient communication or exchange of knowledge among workers on the various sites. Despite sharing of knowledge²⁶⁷ among the APSARA staff through weekly and monthly programs, there is still a lag in the office and in the field. The low interdepartmental conversation percolates to the site workers, who could benefit in comparing work techniques and checking if something is going wrong.

²⁶⁵ Although this doesn’t imply to the fact that more officials could resolve this problem, it just suggests that a better system for enforcing needs to be in place for a country that has undergone a dangerous regime.

²⁶⁶ As the country is still struggling to gain an overall development profit, wages cannot be increased overnight for just the APSARA as there are other organizations and issues, in which the country would need to spend more on (although it doesn’t).

²⁶⁷ Training courses like in Sanskrit, ancient Khmer according to one of the interviewees.

Many of these above mentioned factors were acknowledged in the interviews, and suggest improvements that could be very helpful.

Conclusion:

The educational projects conducted by the Authority beyond the ICC, shows APSARA's willingness to move beyond set frontiers. As one interviewee pointed out one organization can't do all of the works expected, as well as venture into new avenues. Funding is a major issue for the APSARA, but is not its only one. While it grows numerically in different sections, its responsibility does too. APSARA's appreciation of heritage and the international community is understood, yet their need to bring in an internal change before they move further ahead. Culturally the Authority acts almost like a family organization, but the rewards of their work, like personal and work satisfaction, financial rewards, etc., doesn't trickle all the way through to the lowest ranking employee.

CHAPTER 7: CROSS-CULTURAL PERSPECTIVE TOWARDS HERITAGE AND ITS MANAGEMENT

Introduction

Understanding heritage management carried out by different organizations involves understanding their cultural background. This chapter begins by explaining the importance of one's culture in every aspect of formulating and understanding a heritage management process. A cross-cultural perspective on the working techniques of the A.S.I and APSARA is described, including an understanding of the broader implications and intercultural interactions. The study's final leg attempts to give a 'cultural' perspective on the Indians way of working and compare or relate it to the how the Cambodians are working. This has been carried out by analyzing the interviews and field observations and integrated with studies carried out on their individual work methodology. It is acknowledged before moving ahead that the study draws on findings from cross-cultural samples done by other organizations, and the author is completely responsible for any omissions or errors.

A. Heritage Management

Heritage is more than just about the history of a place, community or culture. It is what the community thinks epitomizes their history and culture and is worth saving, even if this isn't always the truth or even symbolized authentically. Encompassing the built, the natural, and the cultural environment, in this thesis the term 'heritage' is taken to mean:

(Heritage)... can also be about politics and uses of the past. Communities make conscious decisions about what to protect and what to remember. Many see heritage as a tool of the nation-state. It is a way to promote social cohesion through the creation of origin myths and promote moral examples of the past. Anything that the state deems worthy of saving eventually enters an arena where its meaning is discussed, debated and sometimes modified.²⁶⁸

In the field of management, it has been noted that a “successful dialogue needed to be multidisciplinary and geographically diverse” and needs to encompass “regional or national strategies and practices... its politics, laws, tourism and economic development”.²⁶⁹ The management of historic sites thus now needs to include academicians, farmers, businesspeople and planners, tourism specialists, regional government officials, economic regenerators and local community representatives among many others.

Representation and inclusiveness on a global scale has also become important for heritage professionals since the 21st century.²⁷⁰ This cannot be achieved this individually, i.e. different area professionals cannot achieve a holistic plan until they are ready to include each other’s fields’ viewpoints. Sometimes most of the decisions affect the people that live around the historic site. The community has a stake in the

²⁶⁸ Harrison Rodney (2010). *Understanding the Politics of Heritage*. Manchester University Press, Manchester, England.

²⁶⁹ Adapted from Foreword, Messenger, Phyllis Mauch, and George S. Smith. 2010. *Cultural Heritage Management: A Global Perspective*. Gainesville: University Press of Florida.

²⁷⁰ Over the course of the 20th century a gradual shift has been seen occurring in the profession with associated people moving towards a global scale and getting involved in projects related to their expertise but in different cultures and countries altogether.

management of the site as much as a professional does, sometimes even more than the professionals involved as they are living with it.

When this heritage starts getting managed and represented in a way the community (if it) wants it to be,²⁷¹ the ‘cultural’ aspect of heritage management comes to the fore. Management of historic sites has been carried out by different professionals over the course of the last two centuries, but was limited sometimes only to archaeologists and historians.²⁷² As times have changed, the uses and practices of heritage have become important to a wider audience including a variety of stakeholders. Above and below ground artifacts, the intangible culture and other aspects of history has brought more professionals into the expanding field of heritage management at both a national and international scale.

This incremental expansion over the years has brought in different practices at various levels. Countries have begun exchanging preservation knowledge and professionals to aid in different projects. With many countries offering their conservation expertise to countries with a dearth of experts or funding, heritage has become an expandable tool. And the practitioners of the host country are often left with no self-identity in their techniques. Their knowledge dependency is visible.

A broader academic inquiry could examine heritage management by different disciplines, by sociologists, culture anthropologists and political scientists. For the

²⁷¹ Not all communities although are pro-conservation, many want something different and hence allow, what is popularly known in the US as ‘demolition by neglect’; in different countries however this is done in a variety of different ways including demolishing on purpose so as to make way for new structures or a better deal they have been offered by a variety of different people including sometimes the government.

²⁷² In South and Southeast Asia, these professionals were given more importance as they were the ones who brought about the interest in the field.

purposes of this study however, the management is demonstrated through cultural observations in the field. The host country is Cambodia and India the country offering its conservation services, under the International Coordinating Committee (ICC). This allows us to understand the working situation.

The region of Southeast Asia where the country is located has undergone what sociologists describe as periods of being “decolonized, nationalized, indigenized, universalized, and globalized”. This seems to have happened at such a pace that there is almost a “lack of locally generated theorizing and continued dependence on Euro-American discourses”.²⁷³

Cambodia has benefitted by the assistance of foreign countries, as noted previously.²⁷⁴ Hence, Cambodian culture becomes an ‘essential part if not central part of identity of (the) community or group’;²⁷⁵ and heritage management is part of the common work.

The Asian views of work, their labor mobility, mutual assistance and community life are well known.²⁷⁶ Studying a region that is so diverse requires that any comparative study cannot simply indicate a dominant theoretical perspective or regional style.²⁷⁷ Cross-cultural studies of cultural resource management have not been written, however.

²⁷³ Pg. 27, King, Victor T. 2008. *The Sociology of Southeast Asia: Transformations in a Developing Region*. Honolulu: University of Hawaii Press.

²⁷⁴ Pg. 160, King, *The Sociology of Southeast Asia*.

²⁷⁵ Pg., 179, King, *The Sociology of Southeast Asia*.

²⁷⁶ Pg. 184-5, King, *The Sociology of Southeast Asia*.

²⁷⁷ Pg. 246, King, *The Sociology of Southeast Asia*.

Visible differences in each countries work could be due in part to the fact that the countries that started conservation practices in India and Cambodia were different. They were Great Britain and France respectively. The preservation ethics in India have continued to change since the mid-19th century and the organizational structure and work techniques have been modified as the A.S.I has adapted some new British approaches. The Cambodian method has never been documented as such, and not compared to any one technique, including the French.

B. The Cross-Cultural Perspective

As has been aptly stated in a cross-cultural management book, “although culture might or might not be the most important influence on the practice of management, it is one aspect of the management context most often neglected”.²⁷⁸ Culture arises from how people interact with their environment.²⁷⁹ It is defined as a “mental construct that is shared amongst certain people, and affects the way they function, act and react”.²⁸⁰ National culture is formed in this manner and in turn affects organizational culture. Hence, the study of heritage and its heritage management is determined to some degree by a country’s culture. This, in turn, provides a means by which it is possible to carry out a cross-cultural study.

The cross-cultural generally relies upon field data collected from one or more societies to examine the scope of human behavior. In the scope of this thesis,

²⁷⁸ Pg. 11, Thomas, David C. 2008. *Cross-cultural Management: Essential Concepts*. Los Angeles: Sage Publications.

²⁷⁹ Pg. 10, Thomas. *Cross-cultural Management*.

²⁸⁰ Pg. 35, Krishna, *The Urban Heritage Management*.

understanding behavior according to one's cultural ties is very important. This has been carried out through a method defined as 'sampling'.

In this research, a small number of participants (15) who accurately represented the field were selected during a two month period.²⁸¹ While it is difficult to get a truly representative sample in a cross-cultural study for both India (8) and Cambodia (7), the individuals who were willing to respond, provided sufficient information. As a result, it is possible to demonstrate the relationships between management and overall work traits of the two countries.

Dealing with a limited amount of information, the argument could be made that it is unrepresentative of an organization or an incomplete description of behavior. This might even come across as an oversimplified representation of the attitudes of a particular culture. It is a start, however, and it is open to modifications in further studies when additional data is collected.

Heritage management in a culture, which acknowledges and is aware of its history, is a task in itself. Organizations that are the major stakeholders in heritage management operate as a complex system. Internal and external environments affect these organizations.²⁸² The work culture and a socio-cultural environment, which includes factors like paternalism and power distance, the internal environment. The external environment includes its activities and the nature of industry, ownership status, and resource availability.

²⁸¹ Pg. 22-23, Thomas. *Cross Cultural Management*.

²⁸² Zeynep Aycan, Rabindra N. Kanungo and Jai B. P. Sinha. 'Organizational Culture and Human Resource Management Practices: The Model of Culture Fit', *Journal of Cross-Cultural Psychology*, 1999.

Hence, the Archaeological Survey of India and APSARA are organizations wherein the team and its leader (for the former) or site collaborators (for the latter) of different projects become ‘managers’. The organization’ and its managers need to “first develop an understanding of cultural trends, organizing patterns and management styles in their own country... then based on this local understanding develop sufficient insight and understanding of other countries and culture where they intend to do business and finally bridge these two cultures, using comparative analysis to tease out similarities and differences”.²⁸³ The intricate nature of the two sets of internal and external factors is explained in relation to the physical and socio-cultural contexts below.

i. Overall Dynamics

India’s heritage management practice spans almost two centuries. As seen in earlier chapters the British had established the practice. Their internal environment follows a hierarchical paternalist²⁸⁴ nature, similar to the way it was setup. In fact, the A.S.I follows the same conservation techniques and manuals it has in the past, significantly influenced by the British thinking.

With the transfer of authority over designated archaeological and historic sites to the Indian central government, the A.S.I can assert full control and act as it deems correct. Being a central authority, decisions related to archaeology, documentation,

²⁸³ Pg. 193, Steers, Richard M., Carlos Sánchez-Runde, and Luciara Nardon. 2010. *Management across Cultures: Challenges and Strategies*. Cambridge: Cambridge University Press.

²⁸⁴ Paternalism here is defined by the superior- subordinate relationships; the former supports the later in reciprocation of deference and loyalty from the later; though this doesn’t mean inclusion of a family like relation in the equation.

structural conservation, and management of the sites rests with the A.S.I. This has led to parochialism with a lack of awareness or sheer neglect of alternative models. This attitude can be attributed to the fact that when the organization began including more Indians, they were mainly drawn from the educated elite.²⁸⁵ The Indian education system, like that in Northern Europe has mainly focused around the development of a person as an individual, emphasizing his contribution to the society.²⁸⁶ This affects Indian decision-making and the way the A.S.I is structured and functions.

A hierarchical organization based on traditional values of society, the A.S.I resonates with the elite' background of the Indian culture. The formality in such a setting means more centralized power, seen in the extent of decision making, concentrated at a single point. The fierce protection of decision-making continues to impede the organization's ability to adapt or change.²⁸⁷ The subordinates are more or less just that, and have no role per-se in decisions or assessments. No matter how qualified an individual might be, a lower ranking official doesn't get to change the rules.

By comparison, the Cambodian agency, APSARA, is an organization heavily influenced by both the French and its own upper class society members, making it a complex system too. The French reinforced in Cambodians the imperatives for educational and economic advancement. The latter mostly from the government or

²⁸⁵ This applies here as the caste system was more prevalent then.

²⁸⁶ Pg. 122-125. Kao, Henry S. R., Durganand Sinha, and Bernhard Wilpert. 1999. *Management and Cultural Values- The Indigenization of Organizations in Asia*. New Delhi: Sage Publications and <http://concorsodocenti.edizionisimone.it/pdf/1-the-educational-system-in-the-European-countries.pdf>

²⁸⁷ Inferred/drawn from argument on Pg. 86-87, by S.B. Ota, *Archaeological Resource Management in India. Cultural Heritage Management*. A noticeable caste difference is seen within the institutional hierarchy, mostly seen in family run businesses, but this is changing now.

law regulators. The upper class while enforcing laws and the French shaping the education as well as Cambodia's economic system, together made the country a slave of its own organizational complexity.

A Buddhist society, Cambodia has different norms for individual behavior and public conduct. The obligations and commitments do not go beyond the defined role of his/her status in the society. Formal, societal roles are rarely confused with informal, personal ones. Personally they adhere to the Buddhist code of personal conduct with ethical and moral lines. Being 'adequately-satisfied' in their life is slowly being replaced from being the only objective, as most of the people now have begun accumulating wealth. As for their public conduct, a Cambodian official might not be censured for disgracing a public office he holds, but for failing to observe required behavior in private life situation, s/he would definitely be.²⁸⁸

Maneuvering in this complex system is difficult for outsiders due to changing dynamics, influences and inter-personal relations. Moreover within the Cambodian organization importance is given to people with either wealth or knowledge or even both. No proper setting be formulated to understand the structure of the organization, although a clear gap is seen when the central authority of the Ministry of Culture is compared to the subordinate, APSARA. Hierarchical roles can also be noticed as creeping in within the organization. While the central government sticks to its rules and decision-making, the APSARA does too, many times leaving a stalemate.

²⁸⁸ Pg. 13-15, Chhim, Sun-him. 1987. *Introduction to Cambodian Culture*. [San Diego]: Multifunctional Resource Center, San Diego State University.

ii. Sites Within and Beyond

The Indian dynamics of decision-making are visible in the way the A.S.I works on projects in India. One aspect of this work is that it does not include any active religious sites. This goes back to the ‘initial reluctance of the government in dealing with religious historic sites, which has had a tremendous impact on the way in which they were treated, a trait that has survived in contemporary preservation and management practice in India’.²⁸⁹ For such sites the A.S.I works with the religious trusts that control the property. Yet for work at these sites too, the approach has always given “importance (to) the archaeological, antiquarian and aesthetic value of a site, often ignoring its historical, social, cultural and/or religious identity”.²⁹⁰

As the custodian of many other sites, the A.S.I’s approach to giving every site a ‘monumental’ and visual effect with little interpretive or extrinsic value was seen in Cambodia, when the agency worked on the Angkor Wat. The attention that the A.S.I gives to a certain number of sites hinders and destabilizes the vast and diverse cultural heritage fabric of India, by favoring one site over another. Its zealous attitude in achieving some visual perfection ‘spills over’ in most of its properties.

By comparison, the Cambodian government’s focus on many actively used religious sites put its conservation activities in a different social and cultural framework. Structures and complexes that have active religious associations are actively being conserved with the help of the APSARA, while early archaeological sites and its 19th and 20th century architecture spread are routinely ignored. This

²⁸⁹ Pg. 31, Krishna, *The Urban Heritage Management*.

²⁹⁰ Pg. 37, Krishna, *The Urban Heritage Management*.

Angkor-focus would seem to indicate that APSARA is unconcerned about Cambodia's broader history. Given the history of the country, however, it is equally possible that APSARA has a limited number of resources for different projects.

Having completed this broad comparison of both of these organizations, it is now possible to focus on the work done on the three projects. Their heritage management and associated work is further understood through inter-organizational interactions and community relationships.

iii. Focusing on the Preservation Field

As it has been over 20 years since the first project at Angkor Wat by the Indian team ended, comments about the behavior of the individuals' and the reactions to those activities might appear out-of-date. To understand the more current activities, however it is helpful to know the history of the A.S.I's activities. As its conservation approach, the A.S.I has been influenced by the European ideology of importance given to aesthetics of ruins and structures, a practice that it still continues. This not only makes the structure sit like an object on a pedestal, it also disconnects it from the environment. This was clearly the case at Angkor Wat, as the area remains in dense forests, a sparkingly clean monument, detached of its historic significance lacking any substantial connection to the current Cambodian residents other than as a tourist mecca.

Many news articles and documents state that the A.S.I team left behind no documents of the work they carried out on the temple when they left. The absence of any official comments on the Indian Ministry of Culture's website regarding the

project upon its completion, and the subsequent maligning by the international conservation community, highlights behavioral characteristics of being almost ‘unaffected’ by these. The hierarchical nature of the Indian Ministry left the A.S.I to defend itself through one book that details the works carried out. Though this book is insufficient, it should be pointed out that such efforts have never been compiled for restoration projects done in India. The difference due to the ‘international’ variable that got added to the equation is something worth exploring. Discussions about these report compilations in interviews with A.S.I team members indicate how they are made as a ‘group work’ with several people with distinct expertise and responsibilities contributing towards their completion. This ‘group effort’ is in a way a good work method, lending the report a different point of view as well as including correct information in it.

Unfortunately however these reports are not valued as much as they should be by the Cambodian staff at the place they get deposited, the APSARA library. For an independent researcher, the lack of interest in the Cambodian librarians to go beyond their responsibility of addressing the needs of a user is frustrating. The recent move to a new complex has left many of these reports in boxes, where the librarians weren’t particularly interested to go beyond their assigned work and aid a researcher in finding particular books. This highlights a characteristic discussed earlier, that of public performance and individual conduct.

a) Individual Conduct and Work Performance

The question here is what work or duties does an employee of A.S.I really want to carry out. As the interviews were equally divided in number among those working in Cambodia under the A.S.I and the rest as individual Indian conservation professionals (4-4), it is difficult to get an exact view on their expectations.

Subsequently, snippets of conversations from the interviews of A.S.I members and online news articles quoting team members were analyzed and compared to cultural models.

Motivations and a level of being content are two defining yardsticks.

Motivation or the extent to which individuals would go to reach a goal was seen in the discussion overheard at the Hall of Dancers in Ta Prohm. Following the team leader and not arguing with their/his 'expertise' is part of a cultural mindset visible in India. Even though in the end the decision by the leader was considered correct and final, the members didn't agree upon it until they were content. Being content with having pointed out the mistake, putting forward one's viewpoint and showing their knowledge was repeatedly observed among the team members. This might have been perceived as defiance in the past but with the world developing and given an individual's independent viewpoint, the team leader readily accepted the opinions put forward. This might be seen as a change in work methods or as a difference in situation, but to comment further one would have to study similar situations in different work sites.

Overall the discussion comes back to one's work expectations. For examples, the Indian team leader hinted at his imminent retirement after having '*served the force*' for 38 plus years. Having worked his entire life and trained in structural conservation by the A.S.I, in the event described above he showed his understanding of where his subordinates were coming from (two were draughts men, one a civil engineer). Expecting loyalty from them yet deference in an educating manner, while establishing a supportive atmosphere at work was all part of the environment, something that has trickled from the British established socio-hierarchical roles. These all correlate with what is a 'paternalistic leadership'.²⁹¹

Largely this shows a pattern in the organizational culture, one that is very similar yet different from other organization's culture in India. It matches characteristics that can be described as diffused but bonded to whole relationship, with the authority having a superior parent figure. Intrinsic rewards and overall conflict resolutions are paramount importance.²⁹² The individuals work goals or expectations from a government job, ranked in order of preference are opportunity, job security, convenient work hours, steady pay, and a match between the person and job.²⁹³

These characteristics and expectations are related to what the Indian citizen's prefer as value orientation according to their culture. It is as shown below.²⁹⁴

²⁹¹ Pg. 161, Thomas. *Cross-Cultural Management*.

²⁹² Adapted from Pg. 205, Thomas. *Cross-Cultural Management*.

²⁹³ Inferred and relied on model on Pg. 151, Thomas. *Cross-Cultural Management*.

²⁹⁴ Adapted from Pg. 48-49 of Thomas. *Cross-Cultural Management*.

	Variations		
Environment	Domination	Harmony	Subjugation
Time Orientation	Past	Present	Future
Nature of People	Good	Mixed	Evil
Activity Orientation	Being	Controlling	Doing
Responsibility	Individualistic	Group	Hierarchical
Conception of Space	Private	Mixed	Public

Table 3: Cultural Variation in Value Orientations for Indians; Source: Adapted from Kluckhohn & Strodtbeck (1961)

Value orientation, here refers to the values that a culture gives preference to and is based on a comparative anthropological framework on how the management literature has conceptualized cultural variations. These are based on observations from the interviews, field experience and research. Individually factors defined a value orientation include: ‘environment’, i.e. it refers to one’s relationship to nature (or organization or group); ‘time orientation’, which is in respect to decision making done with respect to tradition or events in past, present or future; ‘nature of people’ is descriptive of beliefs of human nature; ‘activity orientation’ refers to peoples concentration on either living in the moment (being), controlling it or reflecting (thinking); ‘responsibility’ refers to relationships between people, i.e. concern about one’s self and immediate family (individualistic), for one’s group that can be defined in several ways, or for one’s group arranged in rigid hierarchy; and the final ‘conception of space’ is for the physical space used by an individual.

A similar approach to understand the Cambodian work dynamics reveals their lower individual expectancy. Different settings for the interviews highlighted the

importance of one's individual status in particular environments. The respondents clearly stated their individualism in their work environment or in front of their organization, but in person expressed the opposite. Personally they conducted themselves with humility. This shows the importance given to forge and maintain personal relations. Transcending these into the work place puts them into a tricky position and depends on that persons rank in the organization. Thus the characteristics and expectations related to what the Khmer citizen's prefers as value orientation according to their culture is:

	Variations		
Environment	Domination	Harmony	Subjugation
Time Orientation	Past	Present	Future
Nature of People	Good	Mixed	Evil
Activity Orientation	Being	Controlling	Doing
Responsibility	Individualistic	Group	Hierarchical
Conception of Space	Private	Mixed	Public

Table 4: Cultural Variation in Value Orientations for Cambodians; Source: Adapted from Kluckhohn & Strodtbeck (1961)

The difference between the Cambodian and Indian cultural orientations thus becomes apparent. The Cambodians activity orientation differs as they believe in being rather than participating enthusiastically in the work at hand. Representing an almost 'specific role in a mechanized system', the APSARA employees have become human resources with some having superior roles and others not. The other difference of being 'individualistic' and caring more about their immediate family 'more' than that of their group, is also something that sets them apart from the Indians. However,

this seems to be an almost arbitrary system with importance to rules or procedures set for them by some foreign agency.

b) Interaction within the Organization and with the Surrounding Community

Next, attention is drawn to the relation the organizations have with the communities they work in. A.S.I does not have a good ‘following’ and its work isn’t perceived well by the Indians (in India) in general. Yet a lot has been left unsaid about their thoughts and relations with the communities. This involved understanding the way they communicate (negotiate) with the stakeholders of the heritage, the education of the visitors and residents, their reactions to problems risen due to the conservation works and their social interactions in general.

In negotiations, Indians have been said to be more competitive in nature than people from United States, but studies do not indicate their competence in ‘Asian’ contexts.²⁹⁵ As ‘negotiations’ is an influence due to the Indian culture, this indicates that in talks with the stakeholders maybe the A.S.I would be more inclined to have its way. But as seen through ICC technical session reports,²⁹⁶ in which APSARA participates with other stakeholders, the A.S.I has shown a different behavior. This is an intercultural interaction. For example, for work to be done at the Ta Prohm temple, these reports highlight how A.S.I followed a middle path. This indicates that a contextual difference can alter or influence the culturally based negotiation preference in a cross-cultural setting.

²⁹⁵ Pg. 139, Thomas. *Cross-cultural Management*.

²⁹⁶ In particular the 15th Technical session and others when the Ta Prohm Project began.

As APSARA is itself a stakeholder of the Angkor Park, a mention of its approach to similar situations seems appropriate here. The case of Preah Khan Kompong Svay is important in this respect. In interviews, it was observed that the Khmers were persistent in their efforts yet in their approach focused on relationship building more on than the tasks at hand. Even discussion of the future project showed that they were more interested in maintaining relations with India (and any other country for that matter) in their committee of conservation experts. This was not seen as clearly or completely amongst the Indian Team. It confirms the traditional orientations of both organizations, that to avoid any uncertain decision that might have repercussions.

In solving problems, such as the local workers treatment, a ‘cultural difference’ was seen. The Cambodians, though generally of docile behavior, showed a determined front to get what they needed. This situation, when approached now, evoked the usual ‘no comments’ from the A.S.I. As articles had pointed out, the A.S.I resolved it by negotiating with higher ranked officials in APSARA rather than involving the lower-order Cambodian workers. Developing social relationships was not given the least amount of attention, bringing to light a short-term attitude from within the A.S.I team.

Indians are familiar with describing events in terms of their situational context. Thus descriptions of the above event mainly included discussions about how the project was nearing its end and how the APSARA took care of it, stating it wasn’t their responsibility. From the Cambodian perspective, despite the fact that APSARA

shared the same principle of moving ahead with work, it became apparent that such incidents have become more or less common for them to handle with other teams too. APSARA staff members reserved their responses but were clearly displeased with the handling of matters and stressed the fact this was beyond most of their job portfolios.

The Cambodians deficiency in providing personnel, materials, and supplies and their unassertive nature was apparent in other scenarios too. One of the employees of APSARA mentioned the recent attempts to get their hands on the chemical formulas used by the A.S.I at Angkor Wat to aid in other ongoing projects. The chemicals used have been clearly described in the Angkor Wat project book by the A.S.I.²⁹⁷ The reason behind trying to obtain a formula through official channels might be in progress, but the ‘reluctance’ of A.S.I to share the information openly and freely opens a whole new Pandora’s Box of reasons behind its attitude.

From the perspective of the Indian teams, the work in Cambodia ‘is very similar to back-home’ and the Cambodians ‘are good to work with... they understand what is told’. Hence the A.S.I team appreciates the Cambodians and take pride in transferring knowledge as part of the training.

On the other hand, the lack of initiatives towards general public education is apparent both in India as well as in Cambodia. Educating the public about their history with proper facts is not similar to training a worker on site. In India, mostly untrained tour guides circulate in and around the sites with scarcely placed signage’s

²⁹⁷ The chemicals used have been mentioned in this research too in Chapter 6 in the Angkor Wat section.

giving little information about the monument.²⁹⁸ There are a few places where electronic methods, like audio tours, have been adapted or regular tour programs are conducted around the heritage of the site. Yet this doesn't satiate the needs for interpretation by the visiting restoration teams. Moreover the lack of any such initiatives in Cambodia and comments made in the interviews emphasizes the A.S.I's attitude. Statements like 'this is easy work (Ta Prohm) than compared to home' or 'no, no contact with locals' reinforces points made earlier on. A general attitude might not be formed from these few statements but they suggest that ethnocentrism²⁹⁹ comes afore.

This is in contrast with the efforts some APSARA officials are leading to educate the Cambodians about their heritage in partnership with local communities. These initiatives have been widely accepted and applauded. As one ex-APSARA employee pointed out, these efforts have a long way to go but at least they are being taken. Whether it would be good if they outsourced it or kept it within the organizational folds, he did not know the answer.

Conclusion:

Overall, it seems that A.S.I, as an Indian cultural heritage management organization needs to examine the ideas on which the organization was first created.³⁰⁰ Context sensitivity in Cambodia involves not only improving the knowledge of its

²⁹⁸ Most of the times these signage's have wrong information and are vandalized.

²⁹⁹ Ethnocentrism is an attitude that one's own cultural group is the center of everything.

³⁰⁰ Argument taken from Jai B. P. Sinha R. N. Kanungo, Pg. 93-106. Abstract. 'Context Sensitivity and Balancing in Indian Organizational Behavior'. *International Journal of Psychology*. Volume 32, Issue 2, 1997; <http://www.tandfonline.com/doi/abs>, last accessed on March 3rd 2014 .

personnel but also increasing its understanding of the people and place it is working. Now that the Survey has grown to aiding other cultures preserve their heritage, A.S.I needs to re-balance its “behavior disposition to avoid extremes and to integrate or accommodate diverse considerations”.³⁰¹ This has been lost in the melee of maintaining diplomatic relations, i.e. to preserve their public image, authority and social power. The art of obtaining mastery in their craft is being slowly lost to bureaucratic interruptions. Capable, intelligent, ambitious Indians are recognized as being part of the organization, who due to the conformities’ of Indian culture are being restrained from within.

As for their counterpart in the field, the APSARA and Cambodians in general have a long way to go. In between finding their individual balance, a new work culture is being developed that is being influence by countries like India, France, Japan and all the other members of the ICC. Being tied closely to Cambodian political history, the Authority needs to find a proper standing for itself before the changing power dynamics affect their public culture once again.

³⁰¹ Ibid.

CONCLUSION

Aspects like language, religion, traditions, topography, climate, indigenous economy and many others form a country's culture. These factors and more molded a society, its culture and eventually its history, one that is being preserved today.

Guidelines to evaluate these preservation efforts exist in numerous formats. There are many agencies and countries willing to critique these, with only a few to bring about tangible changes. However, as a result of this thesis' research, it has been found that there exists no particular international guideline to evaluate how an individual nation's culture, affects or builds its organizational culture. This culture affects the decisions made as well as the organizations' work ethics and needs to be studied.

The cognitive recognition and interpretation of culture determines the treatment and use of a particular historic site. Different people do not always perceive built heritage similarly and a consensus needs to be reached for its management. A site's legal, archaeological, historical, functional, religious and economic associations have an important impact on its interpretation and consequently, its management and use.³⁰²

Certain issues then become important and need to be addressed here. These include the nature of the response of local communities to its heritage and culture, the role of cultural values in modernization and the interactions in between. The exchanges between modern, traditional values, and institutions also become important

³⁰² Pg. 43, Ecumenical Coalition on Third World Tourism. 1994. *Indochina Spotlight: Tourism and Tourism Related Developments in Cambodia, Laos, and Vietnam from the International and Thai Press Perspective*. Bangkok: Ecumenical Coalition on Third World Tourism.

as the community determines the nature of acculturation processes. This mechanism provides social and political stability in a changing context.

In the context of this research in Cambodia it has been learned that diplomatic relations are a major part of the reason that countries like India offer technical services to countries like Cambodia, who are slowly establishing themselves, to be a part of the global community. India has shown an optimistic approach on this front, but internal bureaucratic issues could be studied to provide an internal assessment of the A.S.I in international jobs.

The A.S.I's decisions and efforts on the site were understood. It was seen that the Indian organization was acting not just out of set-rules but also organizational and national culture. It has formed a facade of an all-encompassing knowledge resource with certain interviews and anecdotes from the field reinforcing this knowledge.

Overall field observations, however suggest the A.S.I could be a better practice, if it makes changes to the way it manages historic sites at all levels and in all regions. The A.S.I's approach should cover several objectives that it doesn't now, including:

“conservation, preservation, research, education, urban/rural revitalization, economic development, tourism development, use and reuse amongst others”.³⁰³ The three case studies show its change in work attitude, in an international setting and under a larger community of experts. Over the years, it is slowly evident that A.S.I's outsourcing of work to different organizations, allows it to retain overall honor and pride by achieving better standards in a project.

³⁰³ Pg. 71, Greffe, Xavier, and Latika Sahgal. 2001. *Managing our Cultural Heritage*. New Delhi: Aryan Books International, [in association with Cultural Section of the Embassy of France, New Delhi].

On the other side, a considerable amount was learned first-hand about the APSARA as an organization. Although the organization might not have a strong standing or the financial resources, its perseverance to achieve certain goals was worth noting. It might not be said about every individual in the organization, or the organization overall, but the few that were interviewed highlighted this clearly.

The interactions between the Indian and Cambodian organizations could be strengthened and so can the transitions between their past and present. Each had a different approach to the others' problems and approach to conservation in general. The APSARA, still within a small boundary of this field has been playing it safe, working on guidelines charted for the agency by a third party. Only a few officials have been able to break free of this mold trying to introduce new projects yet still within this boundary, thus marking the beginning of a new chapter. While the A.S.I has practiced within India for 150 years and beyond for 55 years, it is still learning the ropes of adjusting to change and new age technology and discoveries, something that Cambodia is being thrust into from early-on.

The aspect of 'culture' was seen playing an important role in both the Cambodian and Indian organizations. The reason behind approaching heritage management through this, was in the end a pragmatic way to evaluate more than just historical connections. Similarities and differences were seen in the way the project was initiated, the other organization approached, problems that occurred and got solved, and in the end how they interacted.

However, the results or conclusions in this research are representative of a very small sample of individuals from the organization. It is also largely based on written material. A lot has been left to speculation and further studies could include a larger sample and include help from more than just one fields' professional. As has also been mentioned repeatedly, that the process of heritage management needs to involve more than just one stakeholder. If all of these individuals and more are involved in evaluation of the individual organizational culture, a significant database of information could be established. This could help monitor the progress and avoid 'misadventures'. As a broader focus gets employed, importance could be divided equally to comprehend factors like economical, societal and cultural constraints. A beginning point for these studies could be to include a larger context and audience to whom the final project will become a daily reminder, one that could be used in future projects around heritage management. An understanding of this by Cambodians would allow a more representative and egalitarian management of their heritage.

The history of Cambodia is being updated with every new discovery through an excavation in the field or a text in the scriptures. This facet of tangible history is understood but the narrative still misses its future. An overall component remains absent for future studies that could employ and use such directions.

BIBLIOGRAPHY

Introduction:

Barry, Coeli. 2013. *Rights to Culture: Heritage, Language and Community in Thailand*. Bangkok: Princess Maha Chakri Sirindhorn Anthropology Centre; Chiang Mai, Thailand: Silkworm Books, 2013. ©2013

Jameson, John H., and Sherene Baugher-Perlin. 2007. *Past Meets Present Archaeologists Partnering with Museum Curators, Teachers, and Community Groups*. Springer E-Books. New York: Springer.

Kasinitz, Philip. 2008. *Inheriting the City: The Children of Immigrants Come of Age*. New York: Russell Sage Foundation.

Morrison, Jenny Knowles. 2010. "From global paradigms to grounded policies: Local socio-cognitive constructions of international development policies and implications for development management". *Public Administration and Development*. 30 (2): 159-174.

Nisbett, Richard E. 2003. *The Geography of Thought: How Asians and Westerners Think Differently and Why*. New York: Free Press. Cross-cultural management.

Richards Greg, Will Munsters ed. *Cultural Tourism Research Methods*. Wallingford, Oxfordshire, UK: Cambridge, Mass., 2010.

Steinberg, David J. 1959. *Cambodia: Its People, Its Society, Its Culture*. New Haven: HRAF Press.

Thomas, David C., and David C. Thomas. 2008. *Cross-Cultural Management: Essential Concepts*. Los Angeles: Sage Publications.

Winter, Tim. 2008. "Post-conflict Heritage and Tourism in Cambodia: The Burden of Angkor". *International Journal of Heritage Studies*. 14 (6): 524-539.

Chapters 1& 2:

Chapman, William. 2013. *A Heritage of Ruins: The Ancient Sites of Southeast Asia and Their Conservation*. Honolulu : University of Hawaii Press

Chandler, David P. 2000. *A History of Cambodia*. Boulder, CO: Westview Press. (3rd edition)

Kerrigan, Loreen. 2006. *The Atlas of Cambodia: National Poverty and Environment Maps*. Phnom Penh, Cambodia: Save Cambodia's Wildlife.

Koninck, Rodolphe de, and Christine Veilleux. 1997. *L'Asie du Sud-Est face à la Mondialisation: les nouveaux champs d'analyse = Southeast Asia and globalization: new domains of analysis*. Québec: Institut québécois des hautes études internationales, Université Laval.

Mannikka, Eleanor. 1996. *Angkor Wat: Time, Space, and Kingship*. Honolulu: University of Hawaii Press.

Mauger, Henry (1939). "Práh Khñ de Kômpon Svây". *BEFEO* (in French) 39: 197–220

Zhou, Daguan, and Peter Harris. 2007. *A Record of Cambodia: The Land and Its People*. Chiang Mai, Thailand: Silkworm Books.

Chapters 3:

Narasimhaiah, B. 1994. *Angkor Vat, India's Contribution in Conservation, 1986-1993*. New Delhi: Archaeological Survey of India.

Jacques, Claude, and Philippe Lafond. 2007. *The Khmer Empire: Cities and Sanctuaries, Fifth to the Thirteenth Centuries*. Bangkok: River Books.

Hendrickson M., Hua Q., and Pryce T.O. 2013. "Using in-slag Charcoal as an Indicator of "Terminal" Iron Production within the Angkorian Period (10th-13th centuries AD) Center of Preah Khan of Kompong Svay, Cambodia". *Radiocarbon*. 55 (1): 31-47 *Preah Khan Kompong Svay*. 2013.

Rooney, Dawn. 2011. *Angkor: Cambodia's Wondrous Khmer temples*. Hong Kong: Odyssey Publications.

Steinberg, David J. 1959. *Cambodia: Its People, Its Society, Its Culture*. New Haven: HRAF Press.

Vickery, Michael. 1998. *Society, Economics, and Politics in Pre-Angkor Cambodia: The 7th-8th centuries*. Tokyo: Centre for East Asian Cultural Studies for UNESCO, Toyo Bunko.

Chapter 4:

www.indembassyphnompenh.org, last visited on January 10, 2014

<http://www.mea.gov.in/>, last visited on January 10, 2014

<http://asi.nic.in/>, last visited on January 10, 2014

http://www.mea.gov.in/Portal/ForeignRelation/Cambodian_Bilateral_Relations_-_MEA_Website.pdf, Downloaded January 1, 2014

<http://www.asiaticsocietycal.com>, last visited on January 10, 2014

<http://www.unesco.org/new/en/phnompenh/culture/tangible-heritage/icc-angkor/>

Aloke Sen, 'Calling up the Past- Conservation as a soft power', *The Telegraph*, June 12, 2013.

Chakrabarty, R. (2008). *The Asiatic Society: 1784-2008, An Overview in Time Past and Time Present: Two Hundred and Twenty-five Years of the Asiatic Society* Kolkata: The Asiatic Society.

Philip Shenon, 'Washing Buddha's Face', *The New York Times*, June 21, 1992; <http://www.nytimes.com/1992/06/21/magazine/washing-buddha-s-face.html?pagewanted=all&src=pm>

ICC 15th, 16th, 17th, 18th, 19th and 20th Technical Session Reports from UNESCO website, <http://unesdoc.unesco.org/images/0021/002164/216460E.pdf>

Devirupa Mehta, 'Wat's the Good Word for India', *The Indian Express*, July 29, 2012; <http://www.newindianexpress.com/thesundaystandard/article578572.ece?service=print>

'A New kind of Battle Rages at Angkor Wat, Politics and Conservation Mix in a dispute over how to best preserve a Cultural Treasure', *Christian Science Monitor*, [http://www.csmonitor.com/1992/0918/18101.html/\(page\)/2](http://www.csmonitor.com/1992/0918/18101.html/(page)/2)

Darryl D' Monte, 'Monumental Decay', *Frontline*, <http://www.frontline.in/navigation/?type=static&page=flonnet&rdurl=fl1819/18190650.htm>

Southeast Asian Weekly, October 3, 2013, <http://www.thesoutheastasiaweekly.com/india-plans-to-open-textile-museum-in-siem-reap-late-year/>

'Stonewalling at Angkor Complex's Temple' (January 25, 2013), 'Ta Prohm Restoration Workers go on Strike' (February 6, 2013), 'Manager of Temple Restoration to take demands to Indian Embassy' (February 7, 2013), 'Workers get Benefits, Not Jobs' (May 9, 2013), *The Phnom Penh Post*.

Chapter 5:

Chandler, David P. 2000. *A History of Cambodia*. Boulder, CO: Westview Press. (3rd edition).

Mauger, Henry (1939). "Práh Khñn de Kômpon Svây". *BEFEO* (in French) 39: 197–220.

Narasimhaiah, B. 1994. *Angkor Vat, India's contribution in conservation, 1986-1993*. New Delhi: Archaeological Survey of India.

Archaeological Survey of India. 2005. *Project Implementation Program, Conservation and Restoration plan of Ta Prohm Temple, Siem Reap Cambodia*. Government of India. (Annex 1 &2 of the report provided by A.S.I to APSARA).

Jacques, Claude, and Philippe Lafond. 2007. *The Khmer Empire: Cities and Sanctuaries, Fifth to the Thirteenth Centuries*. Bangkok: River Books.

Chapter 6:

Baillie, Britt, 2005. *Angkor Wat Conserving the Sacred? A Relationship between Buddhism and Heritage Management*. (Master's thesis, University of Cambridge).

Steinberg, David J. 1957. *Cambodia: Its People, Its Society, Its Culture*. New Haven: HRAF Press.

<http://www.autoriteapsara.org/en>, last visited on January 20, 2014

Chapter 7:

King, Victor T. 2008. *The Sociology of Southeast Asia: Transformations in a Developing Region*. Honolulu: University of Hawaii Press.

Steers, Richard M., Carlos Sánchez-Runde, and Luciara Nardon. 2010. *Management across Cultures: Challenges and Strategies*. Cambridge: Cambridge University Press.

Krell, Maya. 1990. *Tourism in Cambodia*. Bangkok: Ecumenical Coalition on Third World Tourism.

Ecumenical Coalition on Third World Tourism. 1994. *Indochina Spotlight: Tourism and Tourism Related Developments in Cambodia, Laos, and Vietnam from the International and Thai Press Perspective*. Bangkok: Ecumenical Coalition on Third World Tourism.

Messenger, Phyllis Mauch, and George S. Smith. 2010. *Cultural Heritage Management: A Global Perspective*. Gainesville: University Press of Florida. (in particular, Archaeological Heritage Resource Management in India by S.B Ota) .

Chhim, Sun-him. 1987. *Introduction to Cambodian culture*. [San Diego]: Multifunctional Resource Center, San Diego State University.

Howard, Peter. 2003. *Heritage: Management, Interpretation, Identity*. London: Continuum.

Thomas, David C., and David C. Thomas. 2008. *Cross-Cultural Management: Essential Concepts*. Los Angeles: Sage Publications.

Cumming, John. 1939. *Revealing India's Past; A Co-Operative Record Of Archeological Conservation And Exploration In India And Beyond*. London: India Society.

Jai B. P. Sinha R. N. Kanungo, Pgs 93-106. Abstract. *Context Sensitivity and Balancing in Indian Organizational Behavior*. International Journal of Psychology. Volume 32, Issue 2, 1997; <http://www.tandfonline.com/doi/abs>, last accessed on March 3rd 2014.

Zeynep Aycan, Rabindra N. Kanungo and Jai B. P. Sinha. *Organizational Culture and Human Resource Management Practices: The Model of Culture Fit*. Journal of Cross-Cultural Psychology, 1999.

Kao, Henry S. R., Durganand Sinha, and Bernhard Wilpert. 1999. *Management and Cultural Values- The Indigenization of Organizations in Asia*. New Delhi: Sage Publications.

Harrison, Rodney. 2010. *Understanding the Politics of Heritage*. Manchester: Manchester University Press in association with the Open University.

Conclusion:

<http://whc.unesco.org/en/news/1095>

<http://www.autoriteapsara.org/en>, last visited on January 20, 2014

Baillie, Britt, 2005. *Angkor Wat Conserving the Sacred? A Relationship Between Buddhism and Heritage Management*. Master's thesis Peterhouse, University of Cambridge.

APPENDIX 1

Individual Research [for officials]

Researcher: Swapna Kothari, Candidate for Master's in Historic Preservation Planning, Cornell University, U.S.A

Topic: Understanding Heritage and Management- A Case-study with Interviews in the field of Historic Preservation in Cambodia- with particular interest in the ASI's contribution

Organization/ Country: _____ Individual Title/Post: _____

Sites Associated with: _____

Years of Association: _____

Conservation Experience so far: _____

Brief view on Cambodia: _____

Individual Involvement: _____

Organizational Involvement: _____

Involvement with Khmers: _____

Experience with Khmers: _____

Notes: Social life, lodging, etc.? Gender? Age? Educational Qualification? Income? Expenditure for Projects?

APPENDIX 2

Elaborate Questions for both Indian and Cambodian sides:

1. Basic relation between Indians and Cambodians on site
2. How far has the ASI come from Angkor Wat in the 80's? Growth? Efforts?
3. What precedence's were followed or avoided?
4. Like in the Angkor Wat book by B.V. Narsaimah- on pg. 15 it was mentioned that 'vegetation around and on the temple is not good...', so how and why did the approach change?
5. Is foreign (in particular ICC and UNESCO) or any country's organization being the strong power in decisions about the heritage of Cambodia?
6. What sequence of work/ phases is generally followed?
7. Who makes/builds this sequence? Who enforces it and oversees it?
8. How far has the ITEC been a resource? (Apart from finance)
9. To what extent comparison to Indian history if done in written materials? Is it done as matter of pride, requirement, why?
10. What sources do they refer to for writing?
11. How is the project report finalized? Especially the conservation methods section; how does this differ from methods followed during the conservation of Angkor Wat?
12. What about the shift in conservation attitude from John Marshall's conservation manual followed in India? Why the shift to using the Venice Charter?
13. How has the Ta Prohm complex in its present state been
 - to work at?

- For access to workers and workers to access? (Raise workers controversy here)
 - As it is being used by the community?
 - As a 'habitat' within the park boundary?
14. How is it when you avoid flooding in the temple by providing drainage away from it affecting the settlers around it? Especially in the rains.
15. What's the next project? Preah Khan Kompong Svay?
16. Does the ASI outsource any work? Especially the project report.
17. How many conferences does the ASI take part in? What's the general atmosphere there towards India?

Questions in common for the ASI, APSARA and Cambodians:

1. How has the preservation of the temples affected the
 - Community life, its boundaries, traditions?
 - Migration?
 - Work? Availability and moving away from temples)
 - Annual patterns- agriculture, tourists, culture?
 - Water levels during high rains
2. What conservation efforts did the Cambodian authorities carry out in 1972-1986 with the French in the Park?
3. What conservation efforts did the Cambodian authorities carry out in 1986-1993 with the India at Angkor Wat?
4. What conservation efforts did the Cambodian authorities carry out in 2004-2013 with the India at Angkor Wat?

5. Did they carry out conservation efforts in the interim period of 1993-2004 with the India at Angkor Wat individually?
6. What future efforts do they plan to take?
7. Given the Parks immense popularity, how do local communities see conservation affecting their business? Are more people enrolling as skilled labor or otherwise? Do they conservation as an industry?
8. What are the incentives for moving in/out of the park? For being associated with this industry? Is there a growing entrepreneurship in education?
9. Has anyone taken more interest in their lifestyle, traditions and culture? Documented these? What are the policies around these?
10. How many people have lived around these temples for generations? Are most of them migrants?
11. How is the relation between the Khmers and the ASI? And the Khmers and the APSARA?

APPENDIX 3

Question for Indian interviewees apart from A.S.I staff:

Research Feedback

Association with A.S.I:

Site associated with:

Years of Association:

Individual/Organization department associated with:

Conservation experience so far:

Questions:

1) How did the organization get the project?

- Tender (bid)
- Being a Government agency
- Other

2) What incentive did the organization have, to take the project?

3) Agency overseeing your organizations' work

- The Archaeological Survey of India (A.S.I)
- Ministry of External Affairs
- Other- Please specify

4) Who financed (major part of) the project?

- The Archaeological Survey of India (A.S.I)
- Ministry of External Affairs
- Others- Please specify

5) General feedback on working with the A.S.I